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HELIX INITIATIVE FOR RESEARCH &
ACADEMICS

SCIENTIFICS PUBLICATIONS

BRIDGING THE GAP BETWEEN RESEARCH AND PRACTICE
JOURNEY STARTED FROM 2021

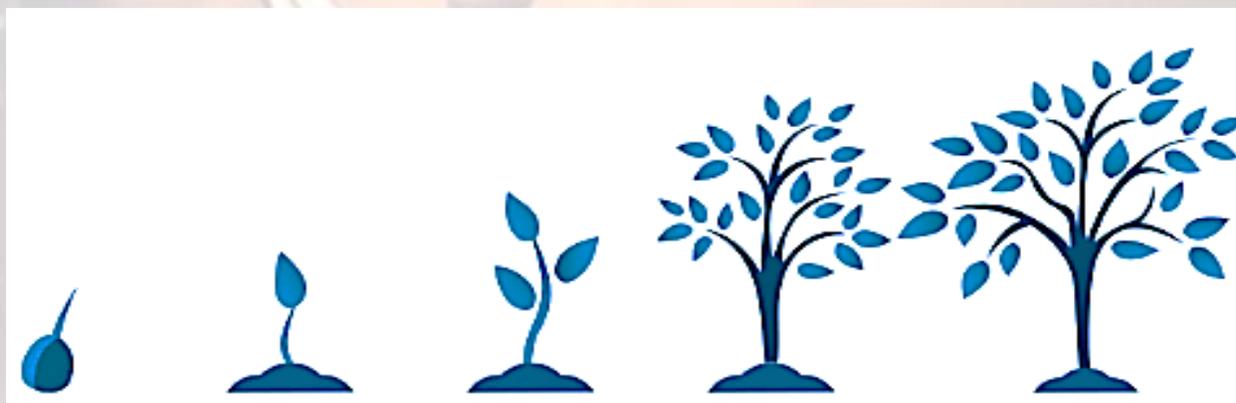
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HIRA: HELIX INITIATIVE FOR RESEARCH & ACADEMICS

HIRA aims at collaborating with the healthcare professional from diverse backgrounds for improving the patient outcomes by addressing the healthcare challenges to promoting excellence in medical practice through impactful research and strategic partnering.

Cultivating The Promise of Today and Tomorrow:

The seed, known as the Helix Initiative for Research & Academics (HIRA), has grown into a robust tree, branching out to nurture the clinical research and academic excellence ecosystem across the nation.



tomorrow

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1. Fetomaternal Outcome of Pregnant Women with Malaria

Authors: Mehwish; Mehreen Memon; Bakhtawar Solangi; Erum; Raishem; Farzana; Tosheeba; Neeta Maheshwary

Journal: Pakistan Journal of Health Sciences

DOI: <https://doi.org/10.54393/pjhs.v6i7.3124>

Abstract:

Malaria during pregnancy is a major public health concern, with devastating implications for both the mother and the unborn child.

Objectives: To evaluate the maternal and fetal outcomes in pregnant women infected with *Plasmodium falciparum* and *Plasmodium ovale/vivax*.

Methods: This descriptive cross-sectional study was carried out in Obstetrics and Gynecology Ward II using non-probability convenience sampling. It included 110 pregnant women diagnosed with malaria, excluding those with underlying health conditions. Data were gathered through interviews, medical records, and laboratory tests. Various maternal and neonatal factors, including hemoglobin levels and birth weight, were recorded. The chi-square test was performed to evaluate the relationship between malaria and fetal outcomes, with p-values <0.05 considered statistically significant.

Results: Among 110 pregnant women, 58 (52.7%) were aged 21–30 years. The majority, 69 (62.7%), had 2–5 pregnancies, while 25 (22.7%) were primigravida. Preterm birth and full-term deliveries were equally distributed at 55 (50.0%), while anemia was prevalent in 82 (74.5%) cases. Low birth weight was observed in 35 (31.8%) neonates. Among 71 women with *P. falciparum* infection, 63 (88.7%) developed anemia, significantly higher than in the *P. ovale/vivax* group (19 of 39; 48.7%) (p <0.001). Preterm birth (45; 63.4%) and low birth weight (34; 47.9%) were also significantly more common in falciparum cases (p <0.001).

Conclusions: *P. falciparum* infection leads to a higher frequency of adverse fetomaternal outcomes compared to *P. ovale/vivax*, with greater incidences of hypoglycemia, low birth weight, preterm birth, and anemia.

2. Clinical and Immunological Manifestations of Patients Presenting With Systemic Lupus Erythematosus At Tertiary Care Hospital, Karachi

Authors: Asfa Ahmed, MuhammadOmer Sultan, Muhammad Inam Khan, Alisha Ahmed

Journal: Biological and Clinical Sciences Research Journal

DOI: <https://doi.org/10.54112/bcsrj.v6i1.1545>

Abstract:

Systemic Lupus Erythematosus (SLE) is a chronic autoimmune disease that affects multiple organ systems, with a high prevalence among young women. It presents various clinical and immunological manifestations, including arthritis, skin rashes, oral ulcers, hematological abnormalities, and neurological involvement. Early diagnosis and management depend on recognising key clinical symptoms and autoantibody profiles. Understanding SLE patterns in different populations is essential for improving diagnostic accuracy, treatment strategies, and patient outcomes.

Objective: This study aims to assess the clinical and immunological characteristics of SLE patients in a tertiary care hospital, identifying common symptoms, disease manifestations, and associated autoantibodies.

Methodology: A cross-sectional study was conducted on 131 patients diagnosed with SLE at a tertiary care hospital. Data were collected on demographics, clinical symptoms, and immunological markers, including antinuclear antibodies (ANA), anti-dsDNA, anti-Sm, anti-Ro,

anti-La, and antiphospholipid antibodies. Statistical analysis was performed using SPSS version 23 to determine the prevalence and associations of disease manifestations.

Results: The study population had a strong female predominance (77.9%), with most patients aged 20–40 (77.9%). Arthritis (67.2%), skin rash (67.2%), oral ulcers (77.1%), and photosensitivity (67.2%) were the most frequent symptoms. Neurological involvement was noted in 36% of patients, while hematological abnormalities included hemolytic anemia (31.3%), thrombocytopenia (29.8%), and leukopenia (13%). Immunological analysis showed ANA positivity in 78.6% of patients, with anti-dsDNA (61.1%) as the most common specific autoantibody. Other antibodies included anti-Sm (20.6%), anti-Ro (15.3%), anti-La (14.5%), and anti-RNP (10.7%). Antiphospholipid antibodies were present in 15.3%–13.7% of patients, indicating a risk of thrombotic complications. Comorbid conditions, such as hypertension (32.8%), diabetes (21.4%), dyslipidemia (16.8%), smoking (25.2%), and obesity (23.7%), were also prevalent, highlighting increased cardiovascular risk.

Conclusion: The findings emphasise arthritis, skin rash, oral ulcers, and anti-dsDNA positivity as key features of SLE diagnosis. The high prevalence of autoantibodies and cardiovascular risk factors calls for regular monitoring, multidisciplinary management, and early intervention to improve patient outcomes. Future research should focus on long-term disease progression and genetic predisposition, with more extensive multicenter studies to refine diagnostic and treatment strategies.

3. Effectiveness of Adjunct Physiotherapy in Enhancing Recovery from Bell's Palsy: A Quasi-Experimental Study

Authors: Abdul Hafeez Bughio¹, Muslim Ali Lakhair¹, Hasnain Ali Moryani¹, Waseem Asif, Neeta Maheshwary

Journal: Proceedings

DOI: <https://doi.org/10.47489/szmc.v39i3.777>

Abstract

Background: Bell's palsy (idiopathic facial nerve paralysis) can lead to incomplete recovery and sequelae in a significant minority of patients. While corticosteroids are the mainstay early treatment, the role of adjunct physiotherapy (facial exercises and related rehabilitation) in improving outcomes remains under-investigated, especially in resource settings like Pakistan.

Objective: To compare the degree of recovery in Bell's palsy patients managed with standard medical therapy alone versus

those receiving additional physiotherapy, in a quasi-experimental hospital-based study.

Methods: A quasi-experimental study was conducted at a tertiary care hospital after approval from the Institutional Review Board. A total of 126 patients with acute unilateral Bell's palsy were allocated to two groups (63 each). Group A received conventional medical therapy (corticosteroids ± antivirals), while Group B received the same plus structured physiotherapy. Outcomes were the House-Brackmann (H-B) grading and the Facial Disability Index (FDI), assessed at baseline and 3 months. Data were analyzed in SPSS v25 using t-tests, Mann-Whitney U, and chi-square tests; effect sizes and 95% confidence intervals were reported, with $p < 0.05$ considered significant.

Results: Of 126 enrolled patients (mean age 40.3 ± 12.5 years; 54% male), 120 completed the 3-month follow-up (6 lost to follow-up, evenly from both groups). Baseline characteristics (age, sex distribution, side of palsy, and initial H-B severity) were comparable between groups ($p > 0.2$ for all). At 3 months, complete or near-complete recovery (H-B grade I or II) was achieved in 53 patients (84.1%) in Group B, versus 42 patients (66.7%) in Group A ($p = 0.014$). No serious adverse events were noted; all patients tolerated the interventions well.

Conclusion: Adjunct physiotherapy significantly enhanced facial nerve recovery and functional outcomes in Bell's palsy compared to medical therapy alone, supporting its integration into standard care. Further randomized studies are recommended to confirm these benefits and to optimize physiotherapy protocols for Bell's palsy.

4. Habit Reversal Training and Relaxation Training for the Treatment of Adult-onset Trichotillomania due to Premature Greying

Authors: Sara Aleem Haqqi, Sheeba Farhan, Syed Zahid Ali Shah, Saba Kalhoro, Syed Kawish Ali, Neeta Maheshwary, Muhammad Iqbal Asif and Waseem Asif

Journal: Pakistan BioMedical Journal

DOI: <https://doi.org/10.54393/pbmj.v8i6.1229>

Abstract

This case study demonstrates the use of Habit Reversal Training (HRT) combined with Relaxation Training (RT) in addressing trichotillomania. The subject, a 28-year-old woman, reported experiencing stress and frequent lateness to work. Her hair-pulling behavior, triggered by the early appearance of grey hair, led her to spend 30 to 60 minutes each morning pulling her hair, which contributed to her tardiness. Over the course of 14 weekly therapy sessions, interventions included self-monitoring, psychoeducation, identification and modification of visual triggers, stimulus-response strategies, and restructuring daily routines. The treatment resulted in reduced stress and effective control of hair-pulling behaviors. The case suggests that incorporating a hair care regimen into therapy may further enhance positive outcomes. It also highlights the importance of considering both psychological and societal influences in the development and treatment of trichotillomania.

5. Household Food Insecurity among Families with Children Aged 2–5 Years in District Naushahro Feroze, Pakistan

Authors: Muhammad Parial Jokhio, Rukhsana Khan, Iqra, Tahir Hussain, Zohaib Ali, Neeta Maheshwary & Waseem Asif

Journal: International Journal of Endorsing Health Science Research

DOI:

<https://doi.org/10.29052/IJEHSR.v13.i2.2025.73-80>

Abstract

Background: Early childhood represents a critical window for physical and cognitive development, heavily influenced by nutritional status and household conditions. Household Food Insecurity (HFI) defined as limited or uncertain access to sufficient, safe, and nutritious food remains a key determinant of childhood undernutrition. In Pakistan, particularly in rural areas, HFI continues to pose a widespread challenge. This study aimed to assess the level and patterns of HFI among families with children aged 2 to 5 years in Union Council Dabhro (Darbelo), Taluka Kandiaro, District Naushahro Feroze, Sindh, Pakistan.

Methodology: A community-based cross-sectional survey was conducted among 106 households with children aged 2 to 5 years. A purposive sampling approach targeted households registered with Lady Health Workers (LHWs). Data were collected using a structured, pretested questionnaire incorporating the Household Food Insecurity Access Scale (HFIAS). Descriptive statistics were analyzed using SPSS version 20.0.

Results: The prevalence of HFI was alarmingly high. A total of 82.1% of households reported being unable to eat preferred foods, 81.1% reduced meal sizes, and 77.4% had fewer meals per day. Furthermore, 70.8% experienced entire days without food, and 51.9% went a full day and night without eating. The mean household size was 9.6

members. Based on HFIAS classification, 42.5% of households were severely food insecure and 57.5% were mildly food insecure. None of the households were classified as food secure or moderately food insecure.

Conclusion: This study underscores a substantial burden of food insecurity among rural families with young children in District Naushahro Feroze. These findings highlight the need for locally tailored, community-based interventions such as nutrition-sensitive social protection programs and targeted education to address food insecurity and improve child well-being in similar rural contexts.

6. Neurological Complications of Type 2 Diabetes Mellitus: A Duration-Based Comparative Study at a Secondary Care Hospital in Karachi, Pakistan

Authors: Muhammad Adil Ramzan • Hamda Rehman • Bhavesh Kumar • Abdul Ghafoor • Neeta Maheshwary • Waseem Asif • Adnan Anwar • Atif A. Hashmi

Journal: Cureus

DOI: <https://doi.org/10.7759/cureus.88562>

Abstract

Objective

Type 2 diabetes mellitus (T2DM) often leads to neurological complications that tend to increase in severity with disease duration. This study compared the prevalence of neurological symptoms in individuals with T2DM with respect to the duration of disease.

Methodology

This cross-sectional study was carried out over a six-month period at secondary care hospitals. A total of 420 patients with T2DM, aged between 40

and 65 years, were categorized into three equal groups of 140 based on duration of diabetes. Group A included newly diagnosed patients (less than or equal to one year), Group B comprised individuals with one to five years of diabetes, and Group C consisted of those with a duration exceeding five years. Clinical evaluations focused on glycemic control (glycated hemoglobin (HbA1c) and postprandial glucose) and neurological complications involving peripheral, autonomic, and central nervous systems. Data were analyzed using IBM SPSS Statistics for Windows, Version 20 (Released 2012; IBM Corp., Armonk, New York, United States), with chi-square and Mann-Whitney tests applied, with p-values <0.05 taken as statistically significant.

Results

This study's findings showed that Group A (less than or equal to one year) had significantly higher mean age, weight, BMI, respiratory rate, heart rate, and random blood sugar levels compared to Groups B and C. Gender distribution varied significantly, with all males in Group A and more females in Group B. Dyslipidemia and smoking history were significantly associated with diabetes duration ($p < 0.001$), while hypertension was not. Neuropathy symptoms, especially tingling and numbness, were more common in Group C, while autonomic symptoms like fatigue and irritability were highest in Group B. Socioeconomic status and type of therapy also showed significant differences across groups ($p < 0.05$).

Conclusion

This study concluded that peripheral neuropathy symptoms were more common in patients with longer diabetes duration, indicating progressive nerve damage over time. Some symptoms, such as burning pain and fatigue, appeared earlier, suggesting early metabolic changes. Autonomic symptoms also varied significantly, highlighting the complex progression of neurological involvement in T2DM.

7. Dermatological Challenges: Adolescents Struggling with Skin Problems

Authors: Humaira Maryum Agha¹, Amber Tufail², Sadaf Asim³, Furquana Niaz⁴, Wajeeha Ahad⁵, Madiha Izhar⁶, Neeta Maheshwary⁷, Waseem Asif

Journal: Journal of Peoples University of Medical & Health Sciences

DOI:

<http://publication.pumhs.edu.pk/index.php/ojs/article/view/1200>

Abstract

BACKGROUND: Adolescence is the period of development from childhood to adult life, which starts with puberty. As a transitional phase with bio-psycho-social development, this period is very challenging for both parents and children.

OBJECTIVE: To fathom out the pattern and frequency of skin diseases in adolescent patients presenting in tertiary care hospital. **METHODS:** A descriptive cross-sectional study was conducted at Fazaia Ruth Pfau Medical College from Jan to Dec 2023. Adolescents (10–19 years) with puberty-related skin conditions were enrolled via non-probability convenience sampling. Hormonal dermatoses were included; congenital and unrelated conditions were excluded. Diagnoses were clinical, supported by investigations where needed. Data were recorded using a structured proforma, and dermatoses were grouped into ten categories for analysis.

RESULTS: A total of 331 adolescents (mean age 15.75 ± 0.29 years; 56.2% females) were enrolled. Most (67.4%) were aged 15–19 years. Infections (27.8%) and infestations (24.8%) were the most common dermatoses, followed by acne (20.2%) and eczema (15.7%). Fungal infections were noted in 12.7%, with pityriasis versicolor and tinea being most frequent. Viral infections (7%) included warts, chickenpox, and molluscum. Five females with hirsutism were diagnosed with PCOS. Dermatoses

were grouped into ten categories for descriptive analysis.

CONCLUSION: Adolescents frequently present with infections, infestations, acne, and eczema, which significantly affect quality of life. Though less common, papulosquamous, hair, and nail disorders also carry considerable psychosocial impact.

8. Intravitreal Anti-VEGF Lucentis: Safety of Multiple Doses from a Single Vial

Authors: Muhammad Ali Haider, Sana Jahangir, Muhammad Amjad, Uzma Sattar

Journal: JOURNAL OF LIAQUAT NATIONAL HOSPITAL

DOI:

<https://journals.lnh.edu.pk/jlnh/Home/article?uid=fd15718e-80d5-4e37-a547-28a2b13c0da3>

Abstract

Background: Anti-VEGF, Intravitreal ranibizumab (Lucentis) has revolutionised the treatment of retinal vascular diseases. However, the high cost remains a significant barrier in resource-limited settings. This study evaluates the safety of administering three intravitreal injections from a single Lucentis vial under strict aseptic conditions.

Objective: To determine the safety of using a single vial of Lucentis for multiple intravitreal injections regarding endophthalmitis and other post-injection complications.

Methods: A retrospective cohort study was conducted at Alehsan Eye Hospital from January to December 2024. Data from 200 patients with diabetic macular edema (DME) or neovascular age-related macular degeneration (nAMD) were reviewed. Each vial of Lucentis was used for three consecutive injections following a standardised aseptic protocol. Data were collected through

retrospective chart review and analysed using descriptive statistics.

Results: No cases of post-injection endophthalmitis were recorded. Minor adverse events included floaters (18%), redness (6%), eye pain (7%), and mild intraocular pressure rise (2%). Intraocular inflammation occurred in 1% of cases. Visual acuity remained stable or improved in most patients.

Conclusion: According to this study, administering multiple doses of Lucentis from a single vial was found to be safe, with no incidence of postoperative endophthalmitis and a low rate of complications. This approach may serve as a practical alternative to traditional procedures, particularly in resource-limited settings. Future studies with larger cohorts are warranted to further validate the safety and long-term outcomes of this strategy.

9. Assessment of Clinical Skills and Knowledge

Authors: Amna Rizwan¹, Muhammad Ali^{1*}, Nida Khalid¹, Asfandyar Asghar

Journal: The Journal of University College of Medicine and Dentistry (JUCMD)

DOI: <https://doi.org/10.51846/jucmd.v4i2.3980>

Abstract:

Objective: To evaluate the self-perceived competence and exposure of undergraduate medical students to clinical skills and theoretical knowledge in ophthalmology.

Methodology: A descriptive cross-sectional study was carried out at Fauji Foundation Hospital, Rawalpindi. A detailed online questionnaire was circulated amongst fourth-year medical students between October 2023 and February 2024 who had completed their end-of-year examination. We included in the analysis 189 out of 204 respondents who had fully completed the questionnaire. A validated, pilot-tested questionnaire with good

internal consistency (Cronbach's alpha = 0.82) was used to collect data on demographics, ophthalmology training exposure, clinical skills competence, ability to recognize ocular emergencies, surgical observation, and research participation.

Results: A total of 189 students responded (mean age: 22.75 ± 0.84 years), two-thirds (66.7%) of which were female. Over 70% of students reported confidence in performing basic ophthalmic skills, including extraocular muscle function, visual acuity, pupillary examination, history taking, visual fields, and squint assessment. However, only 52.7% had hands-on exposure to direct ophthalmoscopy, and a mere 18% had participated in any ophthalmology-related research activities.

Conclusion: The findings highlight a limited and uneven exposure to essential ophthalmic skills among undergraduate students. Key deficiencies, particularly in direct ophthalmoscopy and research participation, highlight the need for structured curriculum enhancements to improve clinical preparedness in ophthalmology.

10. Association of C-Reactive Protein and D-dimer Status with Maternal Outcomes in Pregnant Women with COVID-19

Authors: Summera Aslam, Zeeshan Kashif, Sajida Razzaq, Ushna Laraib, Shamila Ijaz Munir and Shamsa Humayun

Journal: Pakistan Journal of Health Sciences

DOI: <https://doi.org/10.54393/pjhs.v6i6.2676>

Abstract:

C-reactive protein (CRP) and D-dimer are crucial biomarkers that play a key role in maternal health, helping to assess risks and minimize complications.

Objectives: To find the association of CRP and D-dimer status with maternal outcomes in pregnant women with COVID-19.

Methods: The prospective cohort study was carried out at the Department of Obstetrics and Gynaecology, Sir Ganga Ram Hospital, Lahore, from July to September 2020. Demographic data, laboratory parameters including COVID-19, D-dimer and CRP levels and maternal outcomes were recorded. Crosstabs and binary logistic regression analyses were performed to measure the risk of adverse maternal outcomes.

Results: Among 112 COVID-19 suspects, 58 (51.8%) were diagnosed as COVID-19 positive, 82 (73.2%) tested positive for CRP, and 19 (17.0%) were D-dimer positive. COVID-19 positive women exhibited twice the mean D-dimer levels (0.92 ± 1.36 vs. 0.43 ± 0.70 $\mu\text{g/mL}$) and a slightly lower mean CRP level (26.47 ± 31.55 vs. 29.30 ± 32.79 mg/L). Ventilator requirement (32.8% vs. 11.1%) and maternal death rate (29.3% vs. 11.1%) were three times higher in COVID-19 positive cases as compared to the COVID-19 negative cases. CRP positive status and COVID-19 positive showed a statistically significant association and higher risk for ventilator requirement as well as maternal death. However, D-dimer positive status did not show any association with ventilator requirement and maternal death.

Conclusions: COVID-19 positivity and CRP positivity in pregnant women are associated with adverse maternal outcomes, including increased ventilator requirement and mortality. However, D-dimer positivity was not related to these adverse maternal outcomes.

11. Comparative Outcomes of Giant Retinal Tear Repair: Choroidectomy with Laser vs. Laser Alone

Authors: Research Hussain Ahmad Khaqan, Hafiz Atteq Ur Rehman, Hasnain Muhammad Baksh, Ahmad Fauzan, Eddaoui Hibat Allah, Aryj Dlensi, Ines Arfaoui, Boughanmi Heni, Muhammad Zafar Iqbal, Neeta Maheshwary, Athar Khan & Dilshad Hussain

Journal: International Journal of Endorsing Health Science

DOI:

<https://doi.org/10.29052/IJEHSR.v13.i1.2025.07-14>

Abstract

Background: Giant Retinal Tear (GRT)-associated retinal detachment is a vision-threatening condition requiring precise surgical intervention. While LASER photocoagulation is a standard treatment, the role of choroidectomy in improving anatomical and functional outcomes remains debated. To compare the surgical outcomes and visual improvement in patients with Giant Retinal Tear (GRT) treated with Choroidectomy and LASER versus LASER alone.

Methodology: A retrospective cohort study was conducted in the Department of Ophthalmology, Lahore General Hospital, over a 12-month period. Twenty patients were enrolled and randomly assigned into two equal groups. One group underwent GRT repair with choroidectomy and LASER, while the other received LASER alone. Postoperative follow-up was conducted for six months.

Results: Both surgical approaches achieved high retinal reattachment rates 90% in the choroidectomy with LASER group and 80% in the LASER-only group indicating a marginally better outcome for choroidectomy in complex cases. Visual recovery was also higher in the choroidectomy group (70%) compared to the LASERonly group (60%). However, preoperative macular status and postoperative management appeared to have a greater influence on visual improvement than the inclusion of choroidectomy.

Conclusion: This study found no significant difference between choroidectomy with LASER and LASER alone in treating giant retinal tears (GRT). Retinal reattachment rates were 90% vs. 80%, and visual improvement was 70% vs. 60%, but the differences were not statistically significant.

12. EFFECTS OF TOPICAL DORZOLAMIDE ON SERUM POTASSIUM LEVELS

Authors: Hussain Ahmad Khaqan, Muhammad Zafar Iqbal, Atteq Ur Rehman, Ahmad Fauzan, Hasnain Muhammad Baksh, Rayyan Zakir Shaikh, Neeta Maheshwary

Journal: Al-Shifa Journal of Ophthalmology

DOI: <https://asjoalshifaeye.org/asjo-issues/vol-21-3-2025/article-8.pdf>

Abstract:

Objective: To evaluate how serum potassium levels are affected by a 2% ocular solution of dorzolamide.

Methods: This study was conducted at the Department of Ophthalmology, Lahore General Hospital, Lahore. A total of 55 patients, with diagnosed cases of primary open-angle glaucoma were enrolled. All participants were prescribed dorzolamide 2% eye drops twice daily in both eyes. Serum potassium levels were recorded at baseline and then monitored monthly for four months. Data was analyzed by using SPSS version 22, and paired sample t-tests were applied to compare potassium levels at 2nd, 3rd and 4th month.

Results: Of the 55 patients, 28 (50.9%) were male and 27 (49.1%) were female, with a mean age of 49 years. The mean baseline serum potassium level was 3.94 ± 0.31 mEq/L. A significant reduction was observed in serum potassium levels from baseline to all follow-up visits, as assessed by paired sample t-test. At 1 month, the mean reduction was 0.21 mmol/L ($p < 0.001$), which increased to 0.46 mmol/L at 2 months ($p < 0.001$). By 3 months, the decline reached 1.03 mmol/L ($p < 0.001$), and at 4 months, the maximum reduction of 1.47 mmol/L was noted ($p < 0.001$).

Conclusion: Topical dorzolamide 2% is associated with a significant and progressive decline in serum potassium levels with continued use. Regular

monitoring of electrolyte levels may be advisable in patients on long-term dorzolamide therapy to prevent potential complications of hypokalemia.

13. Intrusion of Silicone Band; How and When to proceed?

Authors: Dr. Hussain Ahmad Khaqan¹, Hafiz Ateeq Ur Rehman¹, Rayyan Zakir Shaikh², Muhammad Zafar Iqbal³, Ahmad Fauzan¹, Husnain Muhammad Baksh¹, Neeta Maheshwary⁴, Muhammad Athar Khan⁵, Dilshad Hussain⁴**Journal:** Journal of Retina&Vitreous

DOI: Accepted, link will be available as it gets published (in December)

Abstract:

Objective: To describe the management strategy for scleral band intrusion, a complication of scleral buckling.

Material and Methods: A prospective study conducted at the X Hospital, between 2012 and 2018, included 13 patients (11 males, 2 females) with a mean age of ± 20 years. All patients, young individuals with myopia, underwent scleral buckling for rhegmatogenous retinal detachment and developed band intrusion. A detailed history and examination were performed. Band intrusion-related complications, such as redetachment, indicated the need for surgical intervention.

Results: The duration between scleral buckling and band intrusion ranged from ± 6 years. All buckles were placed in the intrascleral position. Among the 13 patients, 6 had band intrusion with shallow retinal detachment. Of these, 3 patients underwent external band removal and laser treatment before and after surgery; 1 patient had retinal redetachment with a giant retinal tear (GRT) and underwent pars plana vitrectomy with internal band removal; 2 patients received laser treatment only. The remaining 7 patients were observed. The retina was

flat in all patients, and visual acuity remained stable.

Conclusion: Scleral buckle intrusion, though rare, can cause serious complications like redetachment, vitreous hemorrhage, uveitis, and endophthalmitis. Surgical intervention may salvage the eye but may not improve functional status. Intervene only if the eye's integrity is at risk; otherwise, the intruding buckle may be left alone. Meticulous scleral buckling and lifelong follow-up are essential to avoid buckle-related complications.

14. Tranexamic Acid reduces blood loss in patients with complex renal stones undergoing Percutaneous Nephrolithotomy: A Randomized Controlled Trial.

Authors: Hazrat-Ullah, Nasir Khan, Ishtiaq-Ur-Rehman, Maaz Khan, Neeta Maheshwary & Amna Saadia

Journal: International Journal of Endorsing Health Science Research

DOI:

<https://doi.org/10.29052/IJEHSR.v13.i2.2025.65-72>

Abstract

Background: Bleeding remains the most common complication in patients with complex renal stones undergoing percutaneous nephrolithotomy (PCNL), contributing to increased morbidity and a higher requirement for blood transfusion. In resource-limited settings, a cost-effective non-surgical intervention such as tranexamic acid (TXA) may serve as a valuable strategy to minimize intraoperative blood loss and transfusion rates. To evaluate the safety and efficacy of intravenous TXA in reducing blood loss and transfusion requirements during PCNL for complex renal stones.

Methodology: This prospective, randomized, double-blind, placebo-controlled clinical trial was conducted at a tertiary care hospital between March 2023 and September 2024. A total of 264 patients with complex renal stones were enrolled and

randomly assigned into two equal groups. One group received intravenous distilled water (PCNL-placebo), while the other group was administered 1 g of intravenous tranexamic acid (PCNL-TXA). Block randomization was used for group allocation. Preoperative, intraoperative, and postoperative parameters were recorded and compared between the groups.

Results: Patients in the PCNL-TXA group had significantly shorter operative times, reduced hospital stays, and a lower postoperative drop in hemoglobin and hematocrit compared to the placebo group. Although the stone clearance rate was higher in the TXA group, it did not reach statistical significance. The requirement for blood transfusion was significantly lower in the TXA group. Complications were more frequent in the placebo group, with 16 (12.1%) Clavien-Dindo Grade III events compared to 6 (4.54%) in the TXA group, mostly related to blood transfusion. Urosepsis occurred in both groups, but no patient required angioembolization.

Conclusion: Intravenous administration of tranexamic acid during PCNL for complex renal stones effectively reduces intraoperative blood loss and the need for transfusion. It also contributes to shorter operative times and reduced hospital stays, offering a safe and affordable adjunct to improve surgical outcomes.

15. Validation of the Pashto Version of the Premature Ejaculation Diagnostic Tool (PEDT)

Authors: Hazratullah, Nasir Khan, Ishtiyaqrehman, Aminuddin and Ahsan Rafi

Journal: Medical Forum Monthly

DOI: <https://doi.org/10.60110/medforum.360210>

ABSTRACT

Objective: The research goal involved evaluating the validity of the Pashto version of the Premature Ejaculation Diagnostic Tool (PEDT) by assessing its relationship with clinical

premature ejaculation (PE) diagnosis and intra-vaginal ejaculatory latency time (IELT).

Study Design: Prospective cross-sectional study
Place and Duration of Study: This study was conducted at the Urology Unit within the Surgery Department of Khyber Teaching Hospital in Peshawar from December 2020 to December 2021.
Methods: A total of 200 males within a 6-month minimum heterosexual relationship participated in the research. Participating subjects had to finish the PEDT questionnaire using the Pashto language.

Results: The study subdivided its population into two separate groups where 91 participants received clinical PE diagnoses while 71 participants did not have PE. Acquired PE was reported by 44 participants out of 60% (n = 44) who received PE diagnosis. Partakers in both groups engaged in sexual intercourse at the same pace achieving an average of two sessions weekly. Each demographic variable including mean age and relationship duration and education reached statistical parity between the two study groups. The participants with PE exhibited self-reported IELT times measuring 1.22 ± 0.52 minutes whereas other participants recorded IELT times measuring 3.73 ± 0.92 minutes. Self-reported IELT showed a negative relationship of 0.6 with results from the Pashto PEDT and the relationship achieved statistical significance at ($p < 0.05$). Patients scored 8 points or above on the PEDT tool were diagnosed with PE whereas scores of 8 points and below indicated no presence of PE. The diagnostic instrument produced nine false-positive outcomes in 73 participants while ten patients received incorrect negative results among 91 participants. The statistical measures calculated from the study demonstrated sensitivity of 89.01% (95% CI: 77.78% -95.26%) alongside specificity at 87.32% (95% CI: 74.26% -95.17%).

Conclusion: The Pashto-translated PEDT serves as both valid and reliable to identify PE in patients who speak Pashto. The tool achieved

strong consistency between its items and produced statistical connections with medical PE evaluations and physical examinations.

16. The Outcome of Proximal Femoral Nailing in Adults Treated for Subtrochanteric Femur Fractures. A Longitudinal Study

Authors: Farman Ullah Khan

Journal: Pakistan Journal of Medical & Health Sciences

DOI: Accepted, link will be available as it gets published

17. The grievances of medical supervisors against medical residents

Authors: Hussain Ahmad Khaqan, Raheela Naz, Ateeq Ur Rehman, Laraib Hassan, Nabeel Akram, Hafiz Mubashir Farooqui, Ahmed Fouzan, Asad Mahmood Khan

Journal: European Eye Research is an international

DOI:

<https://europeaneyeresearch.com/jvi.aspx?un=EER-51196&volume=4&issue=1>

Abstract:

Purpose: The purpose of the study is to evaluate the relationship between medical supervisors and residents which is pivotal for effective medical training programs. Deficiencies in resident performance can jeopardize patient care and trigger grievances from supervisors. This study delves into grievances expressed by medical supervisors against residents, identifying underlying performance deficiencies. Conducted at Lahore General Hospital, the research focuses on seven categories: Inadequate Clinical Skills and Knowledge, Unsatisfactory Humanistic Qualities and Professionalism, Quality of Medical Care, Professional Attitudes and Behaviors, Teamwork and Collaboration, Unexplained Absenteeism and

Workload Management, and Attitude and Work Ethic.

Methods: A 16-item questionnaire was administered to 24 supervisors (92.3% response rate) to gauge deficiencies. Prominent issues included deficient Professional Attitudes and Behaviors (91.7%), Clinical Skills and Knowledge (66.7%), and Humanistic Qualities and Professionalism (66.7%). Concerns were also noted regarding attitude and work ethic (58.35%), absenteeism and workload management (50.05%), teamwork and collaboration (50.05%), and quality of medical care (49.95%).

Results: The study underscores the need for targeted interventions in training to rectify these deficiencies. Incorporating focused training modules could foster well-rounded skill development among residents while promoting teamwork and work ethic.

Conclusion: Addressing deficiencies identified in this study can cultivate patient-centered physicians and elevate medical training programs. However, the study's single-institution focus and supervisor-centric perspective warrant further exploration involving resident feedback for comprehensive insights

18. Outcomes of different surgical procedures for optic disc pit: a meta-analysis

Authors: Khaqan, Hussain A.; Naz, Raheela; Rehman, Hafiz A. ur; Hassan, Laraib; Akram, Nabeel; Farooqui, Hafiz M.; Fauzan, Ahmad; Khan, Asad M.

Journal: Journal of the Egyptian Ophthalmological Society

DOI:

<https://journals.lww.com/egos/pages/articleviewer.aspx?year=2024&issue=17020&article=00004&type=Fulltext>

Abstract

Objective

To assess the surgical outcomes of pars plana vitrectomy (PPV) in conjunction with various adjuvant procedures for optic disc pit maculopathy (ODPM).

Methods

We conducted a literature search to identify clinical studies and case series of surgically treated OPM patients. (1) greater than two patients, (2) surgical treatment and (3) reporting of pre and postoperative visual acuity data were inclusion criteria. We excluded review articles and studies unavailable in the English language. One-way analysis of variance, Pearson's chi-squared test and straightforward linear regression were used to analyze the results.

Results

A total of 838 studies were initially identified as potentially relevant studies. After removing duplicates and screening titles and abstracts, the eligibility of 86 full-text articles was evaluated. There were 50 studies included in the meta-analysis. We identified the following commonly reported techniques: juxtapapillary laser alone, PPV alone or with juxtapapillary laser (PPV/JPL), internal limiting membrane peeling (PPV/ILMP), both ILMP and JPL (PPV/ILMP/JPL), inner retinal fenestration (PPV/IRF), autologous platelet concentrate (PPV/APC), macular buckling alone or with PPV, PPV with ocriplasmin (PPV/OCR) and PPV with autologous scleral flap. All groups showed an improvement in best-corrected visual acuity compared with baseline, with no significant differences between groups. The average OPM resolution rate for all groups was 70% (range: 56–100%), and the average resolution duration was 9.1 months. Central macular thickness was diminished in the PPV, PPV/JPL, and PPV/ILMP groups, but there were no significant differences between groups. There was no effect on the outcomes. Analyses of linear regression revealed significant correlations between preoperative best-corrected

visual acuity and the aforementioned outcome measures. The rate of complete anatomic success and visual improvement following PPV is ~85%. Anatomic and visual success rates for PPV alone are 89% and 100%, respectively, according to subgroup analysis. Gas tamponade, laser and ILMP during vitrectomy are less promising, whereas PPV with ILM flap stuffing may yield better results than cases without it.

Conclusion

We did not find a significant difference in functional outcomes between the various surgical procedures used to treat OPM. Based on the available evidence, PPV is effective for ODPM, while gas tamponade, laser and ILMP should be used with caution. This study is limited by its reliance on retrospective studies and publication bias towards positive outcomes.

19. ADVANCEMENTS IN OPHTHALMIC BIOSIMILARS: A PARADIGM SHIFT IN RETINAL DISEASE MANAGEMENT

Authors: Hussain Ahmad Khaqan, Raheela Naz, Hafiz Ateeq ur Rehman, Laraib Hassan, Nabeel Akram, Hafiz Mubashir Farooqui, Ahmad Fauzan, Asad Mahmood Khan, Muhammad Iqbal Asif, Neeta Maheshwary, Arjumand Ahmed

Journal: Pakistan Journal of Physiology

DOI: <https://doi.org/10.69656/pjp.v20i2.1613>

Abstract

Diabetes macular oedema (DME) stands as the most prevalent cause of vision impairment. This systematic review aimed to assess clinical studies on the efficacy of top anti-vascular endothelial growth factor (anti-VEGF) agents and their biosimilars in treating diabetic macular oedema. This meta-analysis delves into the transformative impact of biosimilars on retinal disease management in ophthalmology, focusing on the global approval and increasing integration of bevacizumab and adalimumab biosimilars. The

bevacizumab biosimilars section explores their approval and cost-effectiveness, particularly in the nuanced application of bevacizumab for retinal diseases. This study highlights the potential utility of biosimilars in treating non-infectious uveitis and discusses economic implications and feasibility in retinal disease management. The profound transformation in retinal disease management, specifically in DME, is underscored, emphasizing the shift from traditional approaches to anti-VEGF therapies, and positive outcomes in visual and anatomical aspects are cited. Addressing a critical need, the abstract emphasizes ongoing research into the long-term efficacy and safety of biosimilars. The importance of guidelines and thorough investigations for sustained positive patient outcomes is highlighted. The continuous quest for innovative therapies to enhance vision outcomes for DME patients is acknowledged. Underscoring the significance of stringent quality control and pharmacovigilance, it emphasizes the need for robust monitoring and immunogenicity testing assays before market approval. The meta-analysis summarizes the monumental shift in retinal disease management due to biosimilar advancements, highlighting their potential for economic solutions and a broader array of treatment options.

20. Visual and anatomical outcomes of pars plana vitrectomy for dropped intraocular lens: A Retrospective Study.

Authors: Hussain Ahmad Khaqan , Raheela Naz , Hafiz Ateeq ur Rehman , Laraib Hassan , Nabeel Akram , Hafiz Mubashir Farooqui 1 , Ahmad Fauzan , Asad Mahmood Khan1 , Muhammad Iqbal Asif , Neeta Maheshwary , Arjumand Ahmed & Muhammad Athar Khan

Journal: International Journal of Endorsing Health Science Research

DOI:

<https://doi.org/10.29052/IJEHSR.v12.i3.2024.154-161>

Abstract

Background: Intraocular lens (IOL) dislocation is a serious cataract surgery complication that can cause significant visual impairment, often necessitating surgical intervention. Pars plana vitrectomy (PPV) has become the preferred method for treating dislocated IOLs, effectively managing both the lens and related vitreous issues. This study aims to assess the visual and anatomical outcomes of PPV in patients who experienced IOL dislocation following complicated phacoemulsification (PE).

Methodology: A retrospective analysis was conducted at the Ophthalmology Department of Lahore General Hospital. The study included 51 patients (33 males, 18 females) aged 35 to 85 years who were referred after experiencing IOL dislocation post-complicated PE. Data were collected on the interval between PE and PPV, preoperative and postoperative visual acuity (VA), and complications. All patients underwent 23-gauge PPV, involving the removal and re-implantation of the IOL.

Results: The average interval between cataract surgery and PPV was 14 days. All patients presented with aphakia and preoperative visual acuity at the counting finger (CF) level. PPV was successfully performed in all cases, with the dislocated IOL being completely freed from any residual vitreous adhesions. Postoperatively, 38 patients (74.51%) achieved a final best-corrected visual acuity (BCVA) between 20/20 and 20/50, while 12 patients (23.53%) attained BCVA ranging from 20/60 to 20/200. Visual acuity remained unchanged in 1 patient (1.96%) due to bullous keratopathy following anterior chamber (AC) IOL implantation.

Conclusion: Pars plana vitrectomy for the removal of a dislocated IOL following complicated phacoemulsification yields excellent visual and anatomical outcomes with a low incidence of postoperative complications.

21. Comparative effects of liraglutide doses with and without exercise on glycemic control and lipid profiles: A Randomized Controlled Trial.

Authors: Uzma Dost Muhammad Rajar, Irfan Shaikh , Sumayya Qazi Navaid Kazi , Yar Muhammad Nizamani , Sadia Kazi , Muhammad Iqbal Asif, Neeta Maheshwary& Arjumand Ahmed

Journal: International Journal of Endorsing Health Science Research

DOI:

<https://doi.org/10.29052/IJEHSR.v12.i3.2024.162-170>

Abstract

Background: Liraglutide, a GLP-1 receptor agonist, is widely used to manage type 2 diabetes and obesity, showing potential benefits in improving glycemic control and lipid profiles, yet its effects across different doses and combined with exercise remain underexplored. This study seeks to determine the effects of three different doses of liraglutide, both with and without exercise, on blood glucose levels and lipid profiles in individuals with varying degrees of diabetes and metabolic risk.

Methodology: This three-arm randomized controlled trial at Isra University Hospital, Hyderabad, assessed the effects of varying doses of Liraglutide (Saxenda) on Glycated Hemoglobin (HbA1c) levels and lipid profiles over six months. Sixty participants aged 20-60 were randomly assigned to receive different doses of Liraglutide, with or without an exercise regimen.

Results: In Group A, Subgroup (i) exhibited a non-significant reduction in HbA1c from 4.85 ± 1.35 to 4.77 ± 1.2 after six months ($p > 0.05$). However, Subgroup (ii) showed a significant reduction ($p < 0.05$) in HbA1c levels after six months. Similarly, Groups B and C also demonstrated significant reductions in HbA1c after three months

of intervention, with continued improvements over six months.

Conclusion: Liraglutide demonstrates significant potential as a therapeutic option for improving both glycemic control and lipid profiles. The study suggests that liraglutide has cardiovascular protective effects that extend beyond the reduction of LDL-C, highlighting its broader clinical benefits.

22. Determining the effects of botulinum toxin A treatment on pain, resting vaginal pressure, and female sexual distress scale among vulvodynia patients

Authors: Rajar, Uzma D.M.a; Ayub, Uzma T.b; Qazi, Sumayya

Journal: Journal of the Egyptian Women's Dermatologic Society

DOI:

https://journals.lww.com/jewds/fulltext/2024/21030/determining_the_effects_of_botulinum_toxin_a.4.a.spx

Abstract

Introduction

Vulvodynia is a painful and constant vulvar discomfort. This condition is often described as a searing or stinging sensation, with an increased awareness of pain (hyperalgesia) and pain sensitivity (allodynia).

Objective

To determine the effects of botulinum toxin A treatment on pain, resting vaginal pressure, and female sexual distress scale among vulvodynia patients.

Patients and methods

A quasi-experimental study was performed on 40 patients with vulvodynia. The assessment was done 3 months after botulinum toxin injection by visual

analog scale, vaginal pressure at rest, and female sexual distress scale.

Results

The findings revealed that the effect of treatment was turned out to be significantly effective ($P < 0.05$) in reducing pain and measured using visual analog scale where the values at baseline were 8.25 ± 3.41 , which reduced to 4.37 ± 2.12 after 3 months of intervention. In addition to that female sexual distress scale also shown a significant reduction after 3 months of treatment. The improvement was noticed with a mean difference of mean difference = 8.21 ± 3.58 ($P < 0.05$, 95% confidence interval). Furthermore, it was shown that botulinum toxin A therapy significantly decreased resting vaginal pressure.

Conclusion

Botulinum toxin type A therapy is a potential alternative for treating female vulvodynia.

23. Effects of Dermal Fillers on Vaginal Laxity and Female Sexual Function: A Minimally Invasive Procedure for Vaginal Rejuvenation

Authors: Uzma Dost Muhammad Rajar , Asher Ahmed Mashhood , Sumayya Qazi , Uzma Tiwana Ayub

Journal: European Medical journal

DOI:

<https://doi.org/10.33590/dermatolamj/FEGR7111>.

Abstract

Introduction:

For improving vaginal rejuvenation and minimizing vaginal laxity, the increased demand for soft tissue fillers may give females seeking such therapies the chance to have better general health and sexual performance. To address a wider range of female health issues, and support a more all-encompassing approach to personal wellbeing

as cosmetic treatments improve, it is crucial to research the possible repercussions of these minimally invasive operations.

Methodology:

The strength of pelvic floor muscles was measured using the Laborie Peritron 9300 (Portsmouth, New Hampshire, USA) perineometer. A 110 mm long conical vaginal probe with a 26 mm diameter, that may extend to 33 mm under pressure, is a characteristic of this device. The vaginal probe is connected to the perineometer's main body by an 80 cm plastic tubing. When the probe is squeezed, the gadget has a pressure sensor that tracks vaginal pressure. A silicone rubber sensor loaded with air is included into the probe itself, to detect pressure in cmH₂O. The Female Sexual Distress Scale-Revised (FSDS-R) was used to measure the participants' degrees of sexual distress, and this method made it easier to gauge the participants' pelvic floor muscle strength.

Results:

The participants' mean age was 39.43±2.12 years, and further demographic characteristics provided evidence that 44% of the participants were married for 10 years and had children; 36% were married for 5 years with no children; and 20% had been married for less than 5 years.

Conclusion:

Soft tissue fillers, which have shown a rise in popularity, are a viable means of resolving issues with vaginal elasticity and rejuvenation.

24. Dose Response Effects of Liraglutide (Saxenda) on Weight Loss among Overweight and Obese Individuals: A Three Arm Randomized Controlled Trial

Authors: Uzma Dost Muhammad Rajar , Najia Ashraf & Amin Fahim

Journal: Athens Journal of Health & Medical Sciences –

DOI: <https://www.athensjournals.gr/health/2024-11-1-4-Rajar.pdf>

Abstract

Introduction: The present is aimed to determine the effects of three different doses of Liraglutide (Saxenda) that are 0.6mg, 1.2mg and 1.8mg with and without exercises on obese population after 6 months of intervention.

Methodology: A three arm randomized controlled trial was performed at Isra Univeristy Hospital, Hyderabad. A total of n=60 obese participants including both male and female were recruited and divided into two groups n=20 participants in each group. Each group was than further divided into two subgroups n=10 participants in each subgroup.

Results: The analyses of the findings had revealed that n=22 participants included in the study were male whereas n=38 were female. The mean Body Mass Index (BMI) of the participants in group A at baseline was 29.95±1.35kg/m² , 30.21±1.56 kg/m² and 29.54±2.33 kg/m² in subgroup (i), (ii) and (iii) respectively whereas in group B the values of BMI at baseline were 30.25±1.56 kg/m² , 29.87±2.56 kg/m² and 30.11±2.33 kg/m² in subgroup (i), (ii) and (iii) respectively. In group C the values were 30.01±2.14 kg/m² , 28.59±2.22 kg/m² and 30.58±1.98 kg/m² in subgroup (i), (ii) and (iii) respectively.

Conclusion: The findings revealed substantial differences in BMI and body fat percentage within each group from baseline through three and six months of intervention. Higher Liraglutide (Saxenda) dosages (1.8mg) resulted with greater decreases in BMI and body fat percentage than lower doses (0.6mg and 1.2mg)

25. Compare the Efficacy of PRP Intervention VS Exosomes for Hair loss, a Case Series Study

Authors: Laila Hassan^{1,*}, Kashif Ali Samin², Samina Mohsin³, Muhammad Iqbal Asif⁴, Neeta Maheshwary⁵, Arjumand Ahmed

Journal: Dermis journal

DOI: <https://doi.org/10.35702/Derm.10019>

ABSTRACT

Background: Hair loss, a prevalent concern affecting a diverse demographic, has prompted the exploration of regenerative therapies such as Platelet-Rich Plasma (PRP) and Exosomes. While both interventions show promise in hair restoration, limited comparative studies exist, necessitating a comprehensive investigation.

Objective: This case series study aims to compare the efficacy of Platelet-Rich Plasma (PRP) intervention and Exosomes as regenerative therapies for the treatment of hair loss. PRP and Exosomes have gained attention as promising interventions in hair restoration but limited comparative studies exist.

Material and methods: The study has enrolled total 5 participants experiencing hair loss. The participants were divided into two groups: Group A, 3 patients received PRP intervention, and Group B, 2 patients received Exosomes therapy. The PRP group (average age 29, all male) underwent 5-6 sessions over 6-16 months, while the Exosomes group (average age 43, all female) received one session with observation periods ranging from 7 to 28 months.

Result: Both treatments demonstrated positive outcomes in improving or maintaining condition

scores. PRP showed varying improvements, while Exosomes exhibited significant improvement after a single session, outperforming PRP.

Conclusion: The study suggests the need for further research with larger sample sizes and longer-term follow-ups for a comprehensive evaluation of treatment efficacy.

26. Efficacy of Topical Finasteride 0.25% With Minoxidil 5% Versus Topical Minoxidil 5% Alone in Treatment of Male Pattern Androgenic Alopecia

Authors: Nazia Asad MD^a, Maria Naseer MD^b, Rabia Ghafoor MD

Journal: Journal of Drugs in Dermatology

DOI: [doi:10.36849/JDD.7826](https://doi.org/10.36849/JDD.7826)

ABSTRACT

Background: Androgenetic Alopecia (AGA) (male pattern hair loss) is the most common form of alopecia in men, affecting 30% of men by the age of 30 years and 50% by the age of 50 years.

Objective: To compare the efficacy of topical finasteride 0.25% with minoxidil 5% versus topical minoxidil 5% alone in the treatment of male pattern androgenic alopecia.

Methods: A total of 164 male patients aged between 30 and 60 years, presenting with androgenic alopecia of more than 2 months duration, were included in this single-blind study conducted at the Department of Dermatology, JPMC, Karachi. The patients were randomly divided into two groups: Group A (topical finasteride 0.25% with minoxidil 5%) and Group B (topical minoxidil 5% alone). Patients were followed up for 12 weeks, and hair regrowth was assessed at each visit.

Results: The mean age in Group A was 33.99±5.97 years, and in Group B, it was 33.91±5.71 years. At baseline, the mean salt score was 1.8±0.7 in both groups. The efficacy of the treatment was

significantly higher in Group A (86.7%) compared to Group B (69.1%; P=0.006).

Conclusion: The combination of topical finasteride 0.25% with minoxidil 5% provides superior efficacy in the treatment of male pattern androgenic alopecia compared to topical minoxidil 5% alone. These findings support the use of this combination therapy as a potential treatment option for patients with androgenic alopecia.

27. Platelet rich plasma in androgenetic alopecia: A critical analysis of current treatment modalities

Authors: Kashif Ali Samin¹, Laila Hassan¹, Saman Waseem¹, Syeda Komal Bukhari², Umaima Afzal³, Shumaila Khan¹, Samina Mohsin¹

Journal: Journal of Pakistan Association of Dermatologists

DOI:

<https://www.jpap.com.pk/index.php/jpap/article/view/2874>

We aimed to review the clinical research using PRP for the treatment of Androgenic alopecia. Furthermore, our other objective was to compare the PRP therapy with the traditional finasteride treatment to assess the better treatment in terms of efficacy. This systematic review was conducted by following the protocol defined by Khan et al.⁸ containing 5 step procedure to access high-quality relevant literature. Best Evidence Topic (BET) reports protocol was used for accessing the protocol, patient characteristics, intervention or defining question and relevant outcomes. All articles from Google scholar, PubMed, Conference Proceedings, Medline, and Cochrane Central Register for Controlled Trials were used in the first screening for gathering relevant information. Two independent authors were assigned to evaluate the study design. Only 5 studies of platelet-rich plasma and 5 studies of finasteride treatment were included. All

the evidence was fulfilling the level 2 CEMB criteria. A total of 3538 patients were suffering from baldness. None of the study achieved 10 points. Only two platelet rich plasma studies while single study of finasteride treatment, were given 9 score. Results concluded that PRP is far way better than finasteride in terms of high hair growth in less duration, with minimum to no side effects.

28. To Study the Fetomaternal Outcomes of Pregnancy with Obesity Retrospective Case-Control Study

Authors: Soveyah Rahman¹, Saima Shabbir², Aisha Moon^{3*}, Tayyaba Riaz Abbasi⁴, Kanwal Altaf² and Mehnaz Bunyad²

Journal: Liaquat National Journal of Primary Care

DOI:

<https://journals.lnh.edu.pk/lnjpc/pdf/599972c5-bd26-42e1-84e5-86fb867790fb.pdf>

Abstract

Background: Increasing incidence has been seen among women of reproductive age with every one out of five women being affected by obesity. Obesity poses unfavorable outcomes for both mother and child causing ten percent of gestational diabetes and pre-eclampsia, neonatal deaths.

Objective: To find the association of obesity in pregnancy with maternal and perinatal outcomes. The objective is to investigate the association between maternal obesity during pregnancy and various fetomaternal outcomes and outcome of occurrence of cesarean section deliveries, gestational diabetes, preeclampsia, macrosomia, low birth weight babies, and shoulder dystocia among pregnant women with obesity compared to non-obese pregnant women. The study will assess the relative risk and confidence intervals for all the described outcomes.

Subject and Methods: This cohort study was performed in the Department of Obstetrics and

Gynaecology, Kulsoom Bai Valika Hospital, site area, Karachi from February to August 2021. A total of 220 patients were included, 110 patients with a BMI equal to or more than 30 kg/m² were exposed group and 110 cases BMI less than 30 kg/m² were in the non-exposed group. A detailed history and examination, baseline investigations were carried out. Performa was given to patients of each group, and outcomes were recorded.

Results: The average age of the patients was 28.73±6.52 years. The rate of cesarean section and PIH was 3 times more likely in obese groups than non-obese groups [RR=2.74 95%CI: 1.69-3.31] and [RR=3.08 95%CI: 2.11-4.49] respectively. The rate of GDM and preeclampsia was also 2 times more likely in the obese group than the non-obese group [RR=1.48 95%CI: 1.07-2.05] and [RR=2; 95%CI: 1.05-3.79] respectively. The rate of low birth weight was not statistically significant between obese and non-obese groups (p=0.053). While rate of macrosomia 7 times and Shoulder Dystocia time 5 more likely in obese groups than non- obese groups [RR=6.85; 95%CI: 3.24-14.48] and [RR=4.80; 95%CI: 2.56-8.99] respectively. **Conclusion:** Obesity is a challenge of the present era for obstetricians, which is reaching the status of epidemic worldwide. This study shows that obesity in pregnant females is directly proportional to poor fetomaternal outcomes, therefore pregnant obese females should be managed as a high-risk case.

29. The Correlation of Red Cell Distribution Width With Peripheral Blood Smear: A Study From a Tertiary Care Hospital in Peshawar

Authors: Sumira Abbas • Mian Mufarih Shah • Mehwash Iftikhar

Journal: Cureus Journal of Medical Science

DOI: <https://www.cureus.com/articles/314509-the-correlation-of-red-cell-distribution-width-with-peripheral-blood-smear-a-study-from-a-tertiary-care-hospital-in-peshawar#!/>

Abstract

Objective: Anemia is a condition characterized by a shortage of red blood cells (RBCs) and hemoglobin (Hb). A peripheral blood smear (PBS) test involves examining a blood sample to identify important abnormalities in the red blood cells, white blood cells (WBC), and platelets. The aim of this study was to correlate the red cell distribution width (RDW) with peripheral blood smear findings in anemic patients presenting to a tertiary care hospital in Peshawar.

Methodology: This cross-sectional study was conducted at Hayatabad Medical Complex, Peshawar, from January 15, 2023, to July 14, 2023. A total of 450 patients aged 18 years and above with confirmed or suspected anemia (Hb of <13 g/dL in men and <12 g/dL in women), hemolytic disorders, or conditions affecting RBC morphology were included. Peripheral blood smear analysis was performed by two independent hematologists to minimize observer bias. Spearman's rank correlation coefficient was applied to determine the correlation between red cell distribution width and the morphological findings on the peripheral blood smear.

Results: Among 450 anemic patients, 232 (51.6%) were women, and 218 (48.4%) were men. The mean age was 25.72 ± 23.23 years. RBC indices showed microcytic RBCs in 270 (60.0%) patients, normocytic RBCs in 157 (34.9%), and macrocytic RBCs in 23 (5.1%). Hypochromic RBCs were found in 301 (66.9%) cases and normochromic in 109 (24.2%). Peripheral blood smear analysis revealed polychromasia in 37 (8.2%) patients and hypochromia in 247 (54.9%). Statistically significant correlations were observed between red cell distribution width and most PBS findings.

Conclusion: Microcytic hypochromic anemia was the most prevalent type on the peripheral blood smear, showing a significant correlation with red cell distribution width. The strong correlation between RDW and anisocytosis suggests the

potential utility of RDW as a screening tool in clinical practice.

30. Doripenem, Ertapenem, and Meropenem Sensitivity in Salmonella Typhi: A Cross-Sectional Study From Pakistan

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Journal: Cureus Journal of Medical Science

DOI: <https://www.cureus.com/articles/306718-doripenem-ertapenem-and-meropenem-sensitivity-in-salmonella-typhi-a-cross-sectional-study-from-pakistan#!/>

Abstract

Background

Salmonella Typhi (*S. Typhi*) is increasingly resistant to multiple antibiotics, posing a challenge in treatment, particularly in multidrug-resistant (MDR) cases. Carbapenems, including doripenem, ertapenem, and meropenem, have been considered last-resort options. This study evaluates the effectiveness of these carbapenems against *S. Typhi* isolates in a clinical setting in Peshawar, Pakistan.

Objective

To assess the effectiveness of the carbapenem antibiotics, doripenem, ertapenem, and meropenem, against *S. Typhi*.

Methods

This study collected data from blood cultures of patients diagnosed with *S. Typhi* infections at the Hayatabad Medical Complex in Peshawar, Pakistan for two years: from January 1, 2022, to December 31, 2023. Sensitivity testing was performed using the disk diffusion method in accordance with Clinical and Laboratory Standards Institute (CLSI) guidelines. The analysis examined the sensitivity

rates of the three antibiotics and compared their effectiveness.

Results

A total of 626 *S. Typhi* isolates were tested. Only 11.98% of the isolates were sensitive to doripenem, while 88.02% were resistant to it. In contrast, 35.5% of the isolates responded to ertapenem, with 64.5% being resistant. Meropenem showed the highest efficacy, with 42.7% of the isolates demonstrating sensitivity. These findings highlight the growing challenge of managing multidrug-resistant (MDR) *S. Typhi* infections, especially in regions where resistance to carbapenems is becoming prevalent.

Conclusion

Meropenem proved to be more effective against *S. Typhi* compared to doripenem and ertapenem. The study emphasizes the need for ongoing monitoring of resistance patterns and the exploration of alternative or combination treatment options. These findings have immediate clinical implications for empiric therapy choices and highlight the urgent need for antibiotic stewardship programs in endemic regions.

31. Frequency of Acute Kidney Injury in Patients Admitted With Acute Stroke at Hayatabad Medical Complex, Peshawar

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Journal: Cureus Journal of Medical Science

DOI: <https://www.cureus.com/articles/306347-frequency-of-acute-kidney-injury-in-patients-admitted-with-acute-stroke-at-hayatabad-medical-complex-peshawar#!/>

Abstract

Background

Patients hospitalized with acute stroke are at risk of developing acute kidney injury (AKI), and when both conditions occur together, patient outcomes are often worse. The relationship between stroke type, patient characteristics, and the development of AKI is not fully understood, particularly in tertiary care settings in Pakistan, where healthcare resources and patient characteristics may differ from Western populations.

Objective

To determine the frequency of AKI and identify associated risk factors, including stroke type, severity, and comorbidities, in patients presenting with acute stroke at a tertiary care center in Pakistan, the Hayatabad Medical Complex, Peshawar.

Methods

This cross-sectional study was conducted at Hayatabad Medical Complex, Peshawar, from February to July 2023. A total of 214 patients with acute stroke were enrolled through non-probability consecutive sampling. AKI was defined using Kidney Disease Improving Global Outcomes (KDIGO) criteria as an increase in serum creatinine by ≥ 0.3 mg/dL within 48 hours or ≥ 1.5 times baseline within seven days. Chi-square tests and multivariate logistic regression were used for statistical analysis using IBM SPSS Statistics, Version 23 (IBM Corp., Armonk, NY, USA).

Results

Among 214 stroke patients (mean age 53.08 ± 7.52 years, 59.8% male), AKI occurred in 33 patients (15.4%, 95% CI: 10.8-20.9). Ischemic strokes ($n=147$, 68.7%) showed lower AKI prevalence compared to hemorrhagic strokes (10.2% vs 26.9%, $p < 0.005$). AKI occurred in all severe stroke cases (26/26, 100%) but none in mild (0/12) or moderate (0/149) cases ($p < 0.001$). Comorbidity distribution

showed isolated hypertension in 9.3%, diabetes in 38.3%, and both conditions in 52.3% of patients. Mean baseline creatinine was 0.98 ± 0.24 mg/dL, with peak levels of 1.42 ± 0.38 mg/dL in the AKI group.

Conclusions

In our tertiary care setting, AKI occurred in 15.4% of acute stroke patients, with significantly higher rates of hemorrhagic strokes and severe cases. While hypertension and diabetes were common comorbidities, stroke type and severity were stronger predictors of AKI development. These findings suggest the need for targeted monitoring strategies, particularly in patients with hemorrhagic or severe strokes, to facilitate early detection and management of AKI in acute stroke settings.

32. Effects of combine treatment of tressfix and PRP on the levels of different micro ribonucleic acids among seborrheic eczema patients

Authors: Uzma Dost Muhammad Rajar, Amin Fahim*, Navaid Kaz

Journal: Journal of Pakistan Association of Dermatologists

DOI:

<https://www.jpap.com.pk/index.php/jpad/article/view/2582>

Abstract

Introduction: The research aid in the identification of individual micro Ribonucleic Acids (miRNA) linked to the beneficial tissue healing responses found in patients receiving the medication. Hence the study is aimed to determine the effects of PRP and tressfix serum on the levels of miRNA among seborrheic eczema patients.

Methods: The research comprised both male and female individuals between the ages of 18 and 65

who had mild to moderate seborrheic eczema. Participants were either unresponsive to traditional therapy or resistive to them. Individuals with immune-related diseases, bleeding disorders, active skin infections, serious medical illnesses, allergies to PRP or tressfixserum components, and those who were pregnant or nursing were not eligible.

Results: The analyses of the findings revealed that the levels of miRNA were significantly reduced ($p < 0.05$) in all three groups. Significant reduction was observed in combine group in comparison to PRP and tressfixserum alone groups. In group A the expression of all miRNA was reduced significantly ($p < 0.05$), in comparison to miRNA expression in group B and group C. In group C the expression of two miRNAs that were has-mir-941 and hsa-miRNA-212 was reduced significantly whereas the levels of remaining three miRNA remained non-significantly unaltered.

Conclusion: This study gave evidence of the efficacy of the intervention, which combines platelet-rich plasma (PRP) with tressfix serum, in treating seborrheic eczema. The drop in miRNA levels across all three groups suggests that the therapy had a significant influence on the underlying molecular pathways involved in skin healing and inflammation. The combination group, in comparison to the other treatment groups, showed the most significant drop in miRNA levels.

33. Platelet-Rich Plasma Therapy for Telogen Effluvium: A Comprehensive Evaluation of Efficacy and Safety

Authors: Uzma Dost Muhammad Rajar^{1*}, Amin Fahim², Sumayya Qazi³, Navaid Kazi⁴, Neeta Maheshwary⁵, Arjumand Ahmed- Rph

Journal: Dermis journal

DOI: <https://www.jdermis.com/abstract/platelet-rich-plasma-therapy-for-telogen-effluvium-a-comprehensive-evaluation-of-efficacy-and-safety>

ABSTRACT

Background: Chronic Telogen Effluvium (TE) is a common hair loss condition. This study explores the effectiveness of PRP and Tressfix Serum in treating Chronic TE. It aims to uncover potential therapeutic approaches through microRNA expression analysis.

Objective: The objective is to evaluate the effectiveness and safety of combining platelet-rich plasma (PRP) with Tressfix Serum in treating chronic TE and to evaluate the impact on microRNA expression related to this condition.

Methods: Patients including both male and females of aged between 20-40 years diagnosed with TE were included. Patients with scalp-specific dermatological illnesses, such as psoriasis or seborrheic dermatitis, were excluded. PRP was prepared using a double spin process and injected intradermally at designated scalp sites. Patients underwent a total of seven treatment sessions over a 14-week period

Results: The study demonstrated a significant improvement in hair regrowth and reduction in hair shedding among participants following PRP therapy. All miRNA expression was significantly reduced in group A and group B where as in group C five out of nine miRNA expresses no significant $p > 0.05$ mean difference. The expression levels of hsa-mir-223 were considerably lower in Group A (PRP and Tressfix serum combined) (113.53 ± 2.95) compared to Group B (PRP alone, 140.21 ± 5.56) and Group C (Tressfix serum alone, 163.22 ± 2.37). The expression of hsa-mir-212 was also less in Group A (53.5 ± 7.56) than in Group B (75.58 ± 8.71)

and Group C (87.12 ± 6.9). These variations in expression imply that the combination strategy of PRP and Tressfix serum may have a more significant impact on lowering microRNA expression linked to TE than either therapy alone.

Conclusion: The study underscores the importance of patient selection criteria and meticulous technique in optimizing treatment outcomes.

Further research is warranted to elucidate the long-term efficacy and durability of PRP therapy in TE management.

34. Participants' Experiences and Satisfaction With Sun Protection Factor (SPF) 100 Sunscreen in Actual Use Conditions

Authors: Maria Naseer • Nazia Asad • Armeela Javaid • Ramla Moughal • Hadia Akram • Shafia Mudassir • Muhammad Iqbal Asif • Neeta Maheshwary • Arjumand Ahmed

Journal: Cureus Journal of Medical Science

DOI: <https://www.cureus.com/articles/243450-participants-experiences-and-satisfaction-with-sun-protection-factor-spf-100-sunscreen-in-actual-use-conditions#!/>

Abstract

Background and objective

Exposure to sunlight's ultraviolet (UV) radiation poses various health risks, including sunburn, skin damage, and heightened skin cancer risk. Sunblock usage has surged due to widespread advertising campaigns. Individuals spending time outdoors should employ protective measures like wearing hats, applying sunblock with a high sun protection factor (SPF), covering exposed skin, and seeking shade to mitigate UV exposure's harmful effects. This study's objective is to assess participants' experiences and satisfaction with SPF 100 sunscreen in actual use conditions.

Methodology

This study employed a prospective, single-center design involving 100 participants aged 18 to 70 years. Eligible individuals had Fitzpatrick skin types I-III and were engaged in outdoor activities, excluding those with certain medical conditions or medication use. Each participant received sunscreen tubes (Solero SPF 100, Helix Pharma Pvt. Ltd., Karachi, Pakistan), and clinical evaluations were conducted on the day before and after and day 22 visits, with sunblock application and UV-induced erythema assessments performed.

Results

Our study enrolled participants with a mean age of 25.6 ± 7.1 years, ranging from 15 to 55 years, with females comprising 84% (84) of the sample. Results revealed widespread satisfaction and acceptance of SPF 100 sunscreen, without any reported adverse reactions. A significant majority expressed their willingness to purchase and recommend the sunscreen to others. Furthermore, the majority of healthcare providers expressed satisfaction with prescribing this sunscreen.

Conclusions

In conclusion, SPF 100 sunscreen demonstrated excellent tolerability and acceptability among participants, suggesting its potential utility in both personal sun protection routines and clinical settings.

35. A prospective, observational, multicentre study to evaluate the efficacy of brivaracetam as adjuvant therapy for epilepsy: The Bravo study (2)

Authors: Fowzia Siddiqui, Bashir A Soomro, Ehsan U Rehman, Ahsan Numan, Safia Bano, Jawwad Us Salam, Hazim Brohi, Muhammad Zaheer, Faizan Hyder Memon, Muhammad Wahab Qureshi, Junaid Ahmed Sheikh, Abdul Latif Sunejo,

Amjad Iqbal, Saira Abbass, Saba Zaidi, Sidrah Nawaz, Kaukab Fatima, Samar Altaf, Neeta Maheshwary, Muhammad Athar Khan, Arjumand Ahmed, Muhammad Iqbal Asif

Journal: Drugs in Context

DOI: <https://www.drugsincontext.com/a-prospective-observational-multicentre-study-to-evaluate-the-efficacy-of-brivaracetam-as-adjuvant-therapy-for-epilepsy-the-bravo-study/>

Abstract

Background: Epilepsy is a persistent tendency to experience epileptic seizures and can lead to various neurobiological disorders, with an elevated risk of premature mortality. This study evaluates the efficacy of brivaracetam adjuvant therapy in patients with epilepsy.

Methods: A prospective observational multicentre study that was conducted in Pakistan from March to September 2022, by using a non-probability convenience sampling technique. The population consisted of 543 individuals with a diagnosis of epilepsy for whom adjunctive brivaracetam (Brivera; manufactured by Helix Pharma Pvt Ltd., Sindh, Pakistan) was recommended by the treating physician. The research sample was drawn from various private neurology clinics of Karachi, Lahore, Rawalpindi, Islamabad and Peshawar. Data originating from routine patient visits, and assessments at three study time points, were recorded in the study case report form.

Results: Across four clinical sites, 543 individuals participated, with a mean age of 32.9 years. The most prescribed dosages were 50 mg BD, followed by 100 mg BD. Notably, brivaracetam combined with divalproex sodium was the most prevalent treatment, followed by brivaracetam with levetiracetam. At both the 14th and 90th day assessments, a significant reduction in seizure frequency was observed, with 63.1% of individuals

showing a favourable response by day 90. Treatment-naive individuals exhibited higher rates of seizure freedom and response compared with treatment-resistant individuals.

Conclusions: The study demonstrates the effectiveness of brivaracetam combination therapy in epilepsy management, with notable reductions in seizure frequency and favourable clinical responses observed, particularly in treatment-naive individuals.

36. Efficacy and Safety of Brivaracetam in Persons With Epilepsy in a Real-World Setting: A Prospective, Non-Interventional Study

Authors: Fowzia Siddiqui • Bashir A. Soomro • Mazhar Badshah • Ehsan U. Rehman • Ahsan Numan • Amer Ikram • Muhammad Wazir Ali Khan • Sajjad Ali • Husnain Hashim • Jawwad-us Salam • Asad Akram • Muhammad Irfan Hashmat • Shahid Iqbal • Muhammad Zeeshan Javed • S. Zafar Iqbal • Atif Maqsood • Assadullah Khan • Neeta Maheshwary • Muhammad Athar Khan

Journal: Cureus Journal of Medical Science

DOI: <https://www.cureus.com/articles/208268-efficacy-and-safety-of-brivaracetam-in-persons-with-epilepsy-in-a-real-world#!/>

Abstract

Background and aim: Epilepsy stands out as one of the most prevalent neurological conditions. Brivaracetam (BRV) is a noteworthy antiseizure medication (ASM) distinguished by its pronounced and selective interaction with the synaptic vesicle protein 2A (SV2A) within the brain. Prior investigations, including regulatory trials, post-marketing assessments, and comparative meta-analyses, have consistently underscored BRV's equivalency in efficacy and superior tolerability when pitted against other antiseizure drugs. This study aimed to evaluate the effectiveness, safety,

and acceptability of BRV in treating epileptic patients in the Pakistani population.

Methods: This prospective observational study, conducted in Pakistan from February to December 2022, employed a non-probability consecutive sampling technique. This study included 368 adult patients diagnosed with epilepsy, with a focus on those aged 18 and above experiencing focal seizures. Demographic data, clinical history, seizure types, and epilepsy profiles were recorded. Patients were administered BRV (Brivera; manufactured by Helix Pharma Pvt Ltd., Sindh, Pakistan) monotherapy therapy under physician guidance and followed up for three months. The study assessed changes in seizure frequency, side effects, and drug resistance at baseline, 14th day, and 90th day. Safety aspects were monitored, including documenting any adverse effects associated with BRV therapy.

Results: A total of 368 epileptic patients were included in this study, of which 287 (61.3%) were males and 181 (38.7%) were females. The mean age was 32.91 ± 17.11 years. The mean number of seizures at the baseline visit was 5.74 ± 6.21 , at 14 days was 2.89 ± 3.84 and at 90 days was 1.73 ± 5.01 ($p < 0.001$). Overall, a more than 50% reduction in seizure episodes was achieved in 178 (56.3%) patients at day 90, and less than 50% reduction in seizure episodes was achieved by 95 (26.8%) patients on Day 14, with a highly significant association between them ($p < 0.001$). Among 316 patients, only 41 (4.4%) of all BRV-treated patients experienced adverse events; Of these 41 patients, 17 (41.7%) reported dizziness and 14 (34.2%) reported behavioral issues.

Conclusions: Epileptic patients receiving BRV demonstrated a substantial reduction of greater than 50% seizure episodes at the end of follow-up visits. Moreover, BRV exhibited fewer adverse effects in individuals with epilepsy.

37. A prospective, observational, multicentre study to evaluate the efficacy of brivaracetam as adjuvant therapy for epilepsy: The Bravo study

Authors: Fowzia Siddiqui, Bashir A Soomro, Ehsan U Rehman, Ahsan Numan, Safia Bano, Jawwad Us Salam, Hazim Brohi, Muhammad Zaheer, Faizan Hyder Memon, Muhammad Wahab Qureshi, Junaid Ahmed Sheikh, Abdul Latif Sunejo, Amjad Iqbal, Saira Abbass, Saba Zaidi, Sidrah Nawaz, Kaukab Fatima, Samar Altaf, Neeta Maheshwary, Muhammad Athar Khan, Arjumand Ahmed, Muhammad Iqbal Asif

Journal: Drugs in Context

DOI: <https://www.drugsincontext.com/a-prospective-observational-multicentre-study-to-evaluate-the-efficacy-of-brivaracetam-as-adjuvant-therapy-for-epilepsy-the-bravo-study/>

Abstract

Background: Epilepsy is a persistent tendency to experience epileptic seizures and can lead to various neurobiological disorders, with an elevated risk of premature mortality. This study evaluates the efficacy of brivaracetam adjuvant therapy in patients with epilepsy.

Methods: A prospective observational multicentre study that was conducted in Pakistan from March to September 2022, by using a non-probability convenience sampling technique. The population consisted of 543 individuals with a diagnosis of epilepsy for whom adjunctive brivaracetam (Brivera; manufactured by Helix Pharma Pvt Ltd., Sindh, Pakistan) was recommended by the treating physician. The research sample was drawn from various private neurology clinics of Karachi, Lahore, Rawalpindi, Islamabad and Peshawar. Data originating from routine patient visits, and assessments at three study time points, were recorded in the study case report form.

Results: Across four clinical sites, 543 individuals participated, with a mean age of 32.9 years. The most prescribed dosages were 50 mg BD, followed by 100 mg BD. Notably, brivaracetam combined with divalproex sodium was the most prevalent treatment, followed by brivaracetam with levetiracetam. At both the 14th and 90th day assessments, a significant reduction in seizure frequency was observed, with 63.1% of individuals showing a favourable response by day 90. Treatment-naïve individuals exhibited higher rates of seizure freedom and response compared with treatment-resistant individuals.

Conclusions: The study demonstrates the effectiveness of brivaracetam combination therapy in epilepsy management, with notable reductions in seizure frequency and favourable clinical responses observed, particularly in treatment-naïve individuals.

38. Efficacy and safety of itopride SR for upper gastrointestinal symptoms in patients with diabetic gastroparesis: real-world evidence from Pakistan

Authors: Adil Ramzan, Ghulam Fareed Memon, Asif Ali, Muhammad Masood, Tariq Meher, Adnan Ghafoor, Naveed Ahmed Shehzad, Safian Ahmed, Zunaira Nawaz, Muhammad Rehan, Tariq Saeed, Waqar Taj, Sakhawat Abbass, Ramiz Khan, Hamza Ehsan, Abubakkar Alam, Bilal Manzoor, Muhammad Nawaz Khan, Khalid Mahmood Yahya, Farhan Mukhtiar, Muhammad Asif Javed, Muhammad Usman Sheikh, Danish Janjua, Sumerah Jabeen, Junaid Zafar, Riaz Hussain Khokar, Madeeha Nazar, Neeta Maheshwary, Muhammad Athar Khan

Journal: Drugs in Context

DOI: [https://www.drugsincontext.com/efficacy-and-safety-of-itopride-sr-for-upper-gastrointestinal-](https://www.drugsincontext.com/efficacy-and-safety-of-itopride-sr-for-upper-gastrointestinal-symptoms-in-patients-with-diabetic-gastroparesis-real-world-evidence-from-pakistan/)

[symptoms-in-patients-with-diabetic-gastroparesis-real-world-evidence-from-pakistan/](https://www.drugsincontext.com/efficacy-and-safety-of-itopride-sr-for-upper-gastrointestinal-symptoms-in-patients-with-diabetic-gastroparesis-real-world-evidence-from-pakistan/)

Abstract

Background: Gastroparesis is a serious condition that can be caused by diabetes, surgery or infection, or can be idiopathic. When there is no mechanical obstruction, gastroparesis is characterized by delayed stomach emptying. Itopride, a prokinetic drug, inhibits acetylcholinesterase activity in addition to antagonizing dopamine D2 receptors.

Methods: This prospective, multicentre study is based on real-world data from 988 patients with a diagnosis of diabetic gastroparesis for index (PAGI-SYM2) evaluation at baseline and week 4 of treatment for upper gastrointestinal disorder symptoms.

Results: Upper gastrointestinal symptom severity scores improved significantly after 4 weeks of treatment ($p < 0.001$), with significant improvement across all categories of gastroparesis (very mild (37–58.6%), mild degree (24.6–31.6%), moderate (29.3–7.3%) and severe (8.8–2.6%).

Conclusion: Itopride SR (Nogerd SR) in a 150 mg once-daily dose showed promising results in reducing the severity of upper gastrointestinal disorder symptoms associated with diabetic gastroparesis. Both statistical and clinical effectiveness were observed. Moreover, the treatment demonstrated a favourable tolerability profile, with a low incidence of adverse effects.

39. Real-World Evidence to Evaluate the Efficacy and Safety of Vonoprazan in Gastrointestinal Disorders in the Pakistani Population

Authors: Amanullah Abbasi • Shajee Ahmad Siddiqui • Bikha Ram • Jibran Umar Ayub Khan • Khalid Sheikh • Asif Ali • Waseem Raja Memon • Muhammad Rehan • Muhammad Zia ul Haq • Naresh Kumar Seetlani • Tayyab S. Akhter • Masood Khoso • Asif Javed • Riaz Hussain Khokhar • Zaheer Hussain Memon • Wajid Akbar • M Naeem • Samiullah Shaikh • Abbas Khan Khattak • A. Qayoom Memon • Shaheen Bhatti • Omar Sultan • Idress Shani • Neeta Maheshwary

Journal: Cureus Journal of Medical Science

DOI: <https://www.cureus.com/articles/184544-real-world-evidence-to-evaluate-the-efficacy-and-safety-of-vonoprazan-in-gastrointestinal-disorders-in-the-pakistani-population#!/>

Abstract

Background and aim: While proton pump inhibitor (PPI) therapy has proven to be effective in managing gastroesophageal reflux disease (GERD), a notable portion of patients who experience GERD symptoms may not respond to this treatment. Research suggests that roughly 30% of individuals with a presumed GERD diagnosis may continue to experience symptoms, whether partially or completely, even when receiving PPI therapy. The aim of this study was to assess the treatment of gastrointestinal diseases with a novel potassium-competitive acid blocker (P-CAB), vonoprazan, in terms of its effectiveness and safety in the Pakistani population.

Methods: This prospective, multicenter, observational study was conducted in Pakistan. This study included 1,642 patients from January 2023 to August 2023, aged 18 years, with gastrointestinal disorders. All demographic data, medical history, GERD severity assessment questionnaire (GerdQ), and laboratory parameters, including stool

assessment for *Helicobacter pylori* (*H. pylori*), were observed. Patients were orally treated with vonoprazan at doses of 10 mg or 20 mg, once or twice daily. Statistical analysis was done by one-way ANOVA.

Results: Out of 1,642 patients, 840 (51.2%) were males and 802 (48.8%) were females, with a mean age of 39.81 ± 14.61 years. The mean GerdQ score at baseline was 20.37 ± 15.87 , 7.24 ± 8.15 at the second week of treatment, and 3.70 ± 6.31 at the fourth week of treatment ($p < 0.001$). 90.74% of patients achieved *H. pylori* eradication. Most patients were acid regurgitation and heartburn-free for >70% of days. Most of the patients, 1,283 (78.13%), exhibited good treatment compliance. Mild adverse events were reported in 37 (2.3%) patients.

Conclusions: The use of vonoprazan significantly reduced the likelihood of GERD by improving symptoms and was also highly effective in the elimination of *H. pylori* infections. Vonoprazan was generally well tolerated.

40. Adjunctive Brivaracetam Therapy in Epilepsy: A Prospective Clinical Study

Authors: Abdul Hafeez Bughio; Muslim Ali Lakhari; Sajid Hussain Seelro; Noor Nabi Siyal; Neeta Maheshwary; Muhammad Iqbal Asif; Muhammad Athar Khan

Journal: Pakistan Journal of Health Sciences

DOI: <https://doi.org/10.54393/pjhs.v6i7.2771>

Abstract

Epilepsy is one of those primary illnesses that affect the brain, and the population is estimated to be around 50 million people.

Objective: To evaluate the efficacy and safety of adjunctive Brivaracetam therapy in adult patients with epilepsy.

Methods: This observational, non-interventional, single-center study assessed the use of adjunctive Brivaracetam (BRV) in patients aged ≥ 16 years over six months (October 2023–March 2024). Eligible participants had stable antiepileptic drug (AED) regimens for at least one month before BRV initiation. Demographic data, seizure type, frequency, and intensity were documented at baseline, 3 months, and 6 months. The primary endpoint was the change in seizure frequency. Secondary outcomes included $\geq 50\%$ seizure reduction, seizure freedom, and adverse events. Data were analyzed using SPSS version 23.0.

Results: A total of 168 patients (mean age: 25.1 ± 12.9 years) received adjunctive BRV therapy. Partial seizures and comorbid depression were the most common indications for BRV use. Mean seizure frequency decreased from 5.26 ± 0.29 at baseline to 2.41 ± 0.24 at 3 months. All patients achieved seizure freedom by 6 months. Reported adverse effects were generally mild: somnolence 12 (7%), headache 10 (6%), and dizziness 9 (5%).

Conclusions: Adjunctive BRV therapy demonstrated significant efficacy in reducing seizure frequency and achieving seizure freedom, with a favourable safety profile. These findings support BRV as a promising treatment option for patients with epilepsy unresponsive to conventional AEDs.

41. SYMPHYSIS-FUNDAL HEIGHT MEASUREMENT IN ANTENATAL CARE AT LUMHS HOSPITAL, JAMSHORO: A CROSS-SECTIONAL STUDY

Authors: Saba Kalhor, Sara Laghari, Afshan Memon, Maliha Fatima, Neeta Maheshwary, Muhammad Athar Khan

Journal: Pakistan Journal of Physiology

DOI: <https://doi.org/10.69656/pjp.v21i2.1692>

Abstract

Background: Routine symphysis-fundal height (SFH) measurement during pregnancy is a widely practiced method for estimating foetal size and gestational age in antenatal care. The objective of this study was to determine the SFH values at different gestational ages among pregnant women receiving antenatal care at LUMHS Hospital, Jamshoro and to assess the relationship between SFH and gestational age.

Methods: This cross-sectional study was conducted at LUMHS Hospital, Jamshoro, involving 50 pregnant women aged 18-40 years. SFH measurements were initiated after 28 weeks of gestation and taken at regular intervals. Statistical analysis included mean and standard deviation of SFH values, and correlation analysis.

Results: The mean age of the participants was 27.02 ± 3.66 years, and mean gestational age was 32.62 ± 2.83 weeks. Mean SFH during 28-38 weeks was 30.54 ± 2.62 Cm and increased with advancing gestational age. There was a strong correlation between SFH and gestational age ($r=0.998$).

Conclusion: Symphysial-fundal height measurement showed a strong correlation with gestational age, supporting its usefulness as a supportive tool in antenatal care. However, due to potential variability from clinical and foetal factors, SFH should complement—not replace—ultrasound assessment.

42. Frequency and Severity of Vitamin D Deficiency among Vitiligo Patients in Karachi

Authors: Rabia Rafique, Sadaf Bukhari, Shakila Junaid, Tooba Malik, Farina Zameer, Neeta Maheshwary

Journal: Journal of Pakistan Association of Dermatologists

DOI:

<https://www.jpap.com.pk/index.php/jpap/article/view/2912>

Abstract

Background: Depigmented macules of various shapes are a hallmark of vitiligo, an autoimmune condition brought on by the destruction of melanocytes in the skin. All skin types and both sexes may be affected by the condition, which has been linked to other systemic autoimmune disorders such as scleroderma, lupus erythematosus, alopecia areata and autoimmune thyroiditis.

Objectives: The aim of this study was to assess the frequency and severity of vitamin D deficiency among patients diagnosed with vitiligo.

Methods: This Cross-Sectional study was conducted in the Department of Dermatology Pakistan Navy Station (PNS) Shifa Hospital, Karachi for six months from June 2018 to December 2018. Patients with a clinical diagnosis of vitiligo were enrolled in the study following strict adherence to the defined inclusion and exclusion criteria. A predesigned questionnaire documented demographic factors such as age, name, disease duration and gender. These patients' blood samples were obtained the same day and sent to the pathology lab of PNS Shifa hospital, Karachi to determine their vitamin D levels by radioimmunoassay. Vitamin D levels were documented using a predesigned proforma on the day of reporting.

Results: The patients mean age was 33 ± 19.36 years. A total of 124 patients were included in the study. Among them, 52 (42%) were male and 72 (58%) were female. Vitamin D deficiency was observed in 91 (73%) patients, while 33 (27%) patients had sufficient vitamin D levels.

Conclusion: Vitamin D deficiency was highly prevalent among patients with vitiligo, highlighting the need for routine screening and potential

correction as part of comprehensive management strategies.

43. Clinical and Immunological Manifestations of Patients Presenting With Systemic Lupus Erythematosus At Tertiary Care Hospital, Karachi

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Journal: Biological and Clinical Sciences Research Journal

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Abstract

Systemic Lupus Erythematosus (SLE) is a chronic autoimmune disease that affects multiple organ systems, with a high prevalence among young women. It presents various clinical and immunological manifestations, including arthritis, skin rashes, oral ulcers, hematological abnormalities, and neurological involvement. Early diagnosis and management depend on recognising key clinical symptoms and autoantibody profiles. Understanding SLE patterns in different populations is essential for improving diagnostic accuracy, treatment strategies, and patient outcomes.

Objective: This study aims to assess the clinical and immunological characteristics of SLE patients in a tertiary care hospital, identifying common symptoms, disease manifestations, and associated autoantibodies.

Methodology: A cross-sectional study was conducted on 131 patients diagnosed with SLE at a tertiary care hospital. Data were collected on demographics, clinical symptoms, and immunological markers, including antinuclear antibodies (ANA), anti-dsDNA, anti-Sm, anti-Ro, anti-La, and antiphospholipid antibodies. Statistical analysis was performed using SPSS version 23 to determine the prevalence and associations of disease manifestations.

Results: The study population had a strong female predominance (77.9%), with most patients aged 20–40 (77.9%). Arthritis (67.2%), skin rash (67.2%), oral ulcers (77.1%), and photosensitivity (67.2%) were the most frequent symptoms. Neurological involvement was noted in 36% of patients, while hematological abnormalities included hemolytic anemia (31.3%), thrombocytopenia (29.8%), and leukopenia (13%). Immunological analysis showed ANA positivity in 78.6% of patients, with anti-dsDNA (61.1%) as the most common specific autoantibody. Other antibodies included anti-Sm (20.6%), anti-Ro (15.3%), anti-La (14.5%), and anti-RNP (10.7%). Antiphospholipid antibodies were present in 15.3%–13.7% of patients, indicating a risk of thrombotic complications. Comorbid conditions, such as hypertension (32.8%), diabetes (21.4%), dyslipidemia (16.8%), smoking (25.2%), and obesity (23.7%), were also prevalent, highlighting increased cardiovascular risk.

Conclusion: The findings emphasise arthritis, skin rash, oral ulcers, and anti-dsDNA positivity as key features of SLE diagnosis. The high prevalence of autoantibodies and cardiovascular risk factors calls for regular monitoring, multidisciplinary management, and early intervention to improve patient outcomes. Future research should focus on long-term disease progression and genetic predisposition, with more extensive multicenter studies to refine diagnostic and treatment strategies.

44. Frequency of hepatitis B virus infection among patients with rheumatoid arthritis: a study from a tertiary care centre in Peshawar

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Journal: BioMedica

DOI:

<https://biomedicapk.com/articles/10.24911/BioMedica/5-1190>

Abstract

Background and Objective: Understanding the prevalence is essential for developing guidelines for screening and managing hepatitis

B virus in rheumatoid arthritis patients, particularly in settings like Peshawar, where the burden of both diseases is likely to be high and viral infectivity may rise because of immunosuppression induced by anti-rheumatoid therapy. Therefore, this study was conducted to determine the frequency of Hepatitis B virus (HBV) infection among patients with rheumatoid arthritis presenting at a tertiary care hospital in Peshawar.

Methods: A cross-sectional study was conducted on 231 patients diagnosed with RA. Diagnosis was confirmed using clinical assessment and laboratory investigations, including rheumatoid factor and anti-cyclic citrullinated peptide. All laboratory tests were performed in a single hospital laboratory under the supervision of a senior pathologist. HBV infection was confirmed using a third-generation enzymelinked immunosorbent assay for hepatitis B surface antigen with a cut-off value of 2.0. An independent t-test was applied, keeping $p < 0.05$ as statistically significant.

Results: The age range of patients was 18-60 years, with 43% males and 57% females. Use of disease-modifying antirheumatic drugs was reported by 58% patients while steroid alone was used by 66% patients. HBV testing revealed that only 4% patients had positive and active hepatitis B virus infection. No statistical significance ($p > 0.05$) was observed between HBV infection and age, gender, or type of treatment.

Conclusion: The frequency of rheumatoid arthritis patients infected with Hepatitis B was very low in the population from Peshawar.

However, there is a need to screen hepatitis B virus in all patients undergoing anti-arthritic therapy for improving early diagnosis and management in such cases.

45. Effects of Liraglutide on Thyroid Stimulating Hormone and Level of Depression

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Journal: Annals of Punjab Medical College

DOI:

<https://apmcfmu.com/index.php/apmc/article/view/1695>

Abstract

Background: Liraglutide, a glucagon-like peptide-1 (GLP-1) receptor agonist, is widely prescribed for obesity and type 2 diabetes mellitus due to its glucose-lowering and weight-reducing properties. Recent evidence suggests that GLP-1 analogs may influence thyroid function and mood regulation through their effects on the hypothalamic-pituitary-thyroid (HPT) axis and central neurotransmitter pathways.

Objective: The study aimed to evaluate the effects of Liraglutide on thyroid-stimulating hormone (TSH) levels and depressive symptoms, exploring the interactions between the hypothalamic-pituitary-thyroid (HPT) axis, metabolic factors, and mental health.

Study Design: Randomized controlled trial. **Settings:** Department of Dermatology, Isra University Hospital, Hyderabad, Pakistan. **Duration:** June 2024 to January 2025.

Methods: 60 participants divided into three groups (n=20 each), randomized via the envelope method. Participants received Liraglutide in varying doses (0.6mg, 1.2mg, and 1.8mg), with or without exercise, over six months. TSH levels and depressive symptoms (PHQ-9) were assessed at baseline, three and six months.

Results: TSH levels decreased significantly ($p < 0.05$) with higher Liraglutide doses (1.8 mg) and exercise, showing a dose-dependent response. At baseline, group A subgroup (i) had a mean TSH level of 5.4 ± 1.5 mIU/L, decreasing to 4.8 ± 3.2 mIU/L, while subgroup (ii) saw a reduction from 5.5 ± 1.98 mIU/L to 4.5 ± 2.04 mIU/L. Comparable reductions were observed across other groups, with exercises enhancing the effects. Depression severity showed significant increases in some subgroups, but exercise mitigated these effects, highlighting its role in managing depressive symptoms.

Conclusion: Liraglutide demonstrated a dose-dependent effect on TSH levels and variable impacts on depression. Combining Liraglutide with exercise yielded better outcomes, supporting its use as an adjunctive therapy in managing metabolic and mental health conditions.

46. Fetomaternal Outcome of Pregnant Women with Malaria

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Journal: Pakistan Journal of Health Sciences

DOI: <https://doi.org/10.54393/pjhs.v6i7.3124>

Abstract

Malaria during pregnancy is a major public health concern, with devastating implications for both the mother and the unborn child.

Objectives: To evaluate the maternal and fetal outcomes in pregnant women infected with *Plasmodium falciparum* and *Plasmodium ovale/vivax*.

Methods: This descriptive cross-sectional study was carried out in Obstetrics and Gynecology Ward II using non-probability convenience sampling. It included 110 pregnant women diagnosed with malaria, excluding those with underlying health conditions. Data were gathered through interviews, medical records, and laboratory tests. Various maternal and neonatal factors, including hemoglobin levels and birth weight, were recorded. The chi-square test was performed to evaluate the relationship between malaria and fetal outcomes, with p -values < 0.05 considered statistically significant.

Results: Among 110 pregnant women, 58 (52.7%) were aged 21–30 years. The majority, 69 (62.7%), had 2–5 pregnancies, while 25 (22.7%) were primigravida. Preterm birth and full-term deliveries were equally distributed, 55 (50.0%), while anemia was prevalent in 82 (74.5%) of cases. Low birth weight was observed in 35 (31.8%) of neonates. Among 71 women with *P. falciparum* infection, 63 (88.7%) developed anemia, which was significantly higher than in the *P. ovale/vivax* group, where only 19 out of 39 (48.7%) were anemic ($p < 0.001$). Preterm birth, 45 (63.4%) and low birth weight, 34 (47.9%), were significantly greater in *falciparum* cases ($p < 0.001$).

Conclusions: It was concluded that *Plasmodium falciparum* infection poses a higher frequency of adverse fetomaternal outcomes compared to *Plasmodium ovale/vivax*, characterized by

noticeably greater incidences of hypoglycemia, low weight at birth weight, premature birth, and anemia.

47. Effectiveness of Adjunct Physiotherapy in Enhancing Recovery from Bell's Palsy: A Quasi-Experimental Study

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Journal: Proceedings

DOI: <https://doi.org/10.47489/szmc.v39i3.777>

Abstract

Background: Bell's palsy (idiopathic facial nerve paralysis) can lead to incomplete recovery and sequelae in a significant minority of patients. While corticosteroids are the mainstay early treatment, the role of adjunct physiotherapy (facial exercises and related rehabilitation) in improving outcomes remains under-investigated, especially in resource settings like Pakistan.

Objective: To compare the degree of recovery in Bell's palsy patients managed with standard medical therapy alone versus

those receiving additional physiotherapy, in a quasi-experimental hospital-based study.

Methods: A quasi-experimental study was conducted at a tertiary care hospital after approval from the Institutional Review Board. A total of 126 patients with acute unilateral Bell's palsy were allocated to two groups (63 each). Group A received conventional medical therapy (corticosteroids \pm antivirals), while Group B received the same plus structured physiotherapy. Outcomes were the House-Brackmann (H-B) grading and the Facial Disability Index (FDI), assessed at baseline and 3 months. Data were analyzed in SPSS v25 using t -tests, Mann-Whitney U, and chi-square tests; effect

sizes and 95% confidence intervals were reported, with $p < 0.05$ considered significant.

Results: Of 126 enrolled patients (mean age 40.3 ± 12.5 years; 54% male), 120 completed the 3-month follow-up (6 lost to follow-up, evenly from both groups). Baseline characteristics (age, sex distribution, side of palsy, and initial H-B severity) were comparable between groups ($p > 0.2$ for all). At 3 months, complete or near-complete recovery (H-B grade I or II) was achieved in 53 patients (84.1%) in Group B, versus 42 patients (66.7%) in Group A ($p = 0.014$). No serious adverse events were noted; all patients tolerated the interventions well.

Conclusion: Adjunct physiotherapy significantly enhanced facial nerve recovery and functional outcomes in Bell's palsy compared to medical therapy alone, supporting its integration into standard care. Further randomized studies are recommended to confirm these benefits and to optimize physiotherapy protocols for Bell's palsy.

48. Neurological Complications of Type 2 Diabetes Mellitus: A Duration-Based Comparative Study at a Secondary Care Hospital in Karachi, Pakistan

Authors: Muhammad Adil Ramzan • Hamda Rehman • Bhavesh Kumar • Abdul Ghafoor • Neeta Maheshwary • Waseem Asif • Adnan Anwar • Atif A. Hashmi

Journal: Cureus Journal of Medical Science

DOI: <https://www.cureus.com/articles/383405-neurological-complications-of-type-2-diabetes-mellitus-a-duration-based-comparative-study-at-a-secondary-care-hospital-in-karachi-pakistan#!/>

Abstract

Objective

Type 2 diabetes mellitus (T2DM) often leads to neurological complications that tend to increase in

severity with disease duration. This study compared the prevalence of neurological symptoms in individuals with T2DM with respect to the duration of disease.

Methodology

This cross-sectional study was carried out over a six-month period at secondary care hospitals. A total of 420 patients with T2DM, aged between 40 and 65 years, were categorized into three equal groups of 140 based on duration of diabetes. Group A included newly diagnosed patients (less than or equal to one year), Group B comprised individuals with one to five years of diabetes, and Group C consisted of those with a duration exceeding five years. Clinical evaluations focused on glycemic control (glycated hemoglobin (HbA1c) and postprandial glucose) and neurological complications involving peripheral, autonomic, and central nervous systems. Data were analyzed using IBM SPSS Statistics for Windows, Version 20 (Released 2012; IBM Corp., Armonk, New York, United States), with chi-square and Mann-Whitney tests applied, with p -values < 0.05 taken as statistically significant.

Results

This study's findings showed that Group A (less than or equal to one year) had significantly higher mean age, weight, BMI, respiratory rate, heart rate, and random blood sugar levels compared to Groups B and C. Gender distribution varied significantly, with all males in Group A and more females in Group B. Dyslipidemia and smoking history were significantly associated with diabetes duration ($p < 0.001$), while hypertension was not. Neuropathy symptoms, especially tingling and numbness, were more common in Group C, while autonomic symptoms like fatigue and irritability were highest in Group B. Socioeconomic status and type of therapy also showed significant differences across groups ($p < 0.05$).

Conclusion

This study concluded that peripheral neuropathy symptoms were more common in patients with longer diabetes duration, indicating progressive nerve damage over time. Some symptoms, such as burning pain and fatigue, appeared earlier, suggesting early metabolic changes. Autonomic symptoms also varied significantly, highlighting the complex progression of neurological involvement in T2DM.

49. DERMATOLOGICAL CHALLENGES: ADOLESCENTS STRUGGLING WITH SKIN PROBLEMS

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Journal: Journal of Peoples University of Medical & Health Sciences Nawabshah

DOI:

<http://publication.pumhs.edu.pk/index.php/ojs/article/view/1200/986>

Abstract

BACKGROUND: Adolescence is the period of development from childhood to adult life, which starts with puberty. As a transitional phase with bio-psycho-social development, this period is very challenging for both parents and children.

OBJECTIVE: To fathom out the pattern and frequency of skin diseases in adolescent patients presenting in tertiary care hospital.

METHODS: A descriptive cross-sectional study was conducted at Fazaia Ruth Pfau Medical College from Jan to Dec 2023. Adolescents (10–19 years) with puberty-related skin conditions were enrolled via non-probability convenience sampling. Hormonal dermatoses were included; congenital

and unrelated conditions were excluded. Diagnoses were clinical, supported by investigations where needed. Data were recorded using a structured proforma, and dermatoses were grouped into ten categories for analysis.

RESULTS: A total of 331 adolescents (mean age 15.75 ± 0.29 years; 56.2% females) were enrolled. Most (67.4%) were aged 15–19 years. Infections (27.8%) and infestations (24.8%) were the most common dermatoses, followed by acne (20.2%) and eczema (15.7%). Fungal infections were noted in 12.7%, with pityriasis versicolor and tinea being most frequent. Viral infections (7%) included warts, chickenpox, and molluscum. Five females with hirsutism were diagnosed with PCOS. Dermatoses were grouped into ten categories for descriptive analysis.

CONCLUSION: Adolescents frequently present with infections, infestations, acne, and eczema, which significantly affect quality of life. Though less common, papulosquamous, hair, and nail disorders also carry considerable psychosocial impact.

50. The Study on Awareness of Empowering Minds: The Role of Psycho-Education in Mental Health

Authors: Binish Nawaz, Neeta Maheshwary, Arjumand Ahmed, Muhammad Iqbal Asif, Syed Awais Aftab and Muhammad Aman Hasan

Journal: Liaquat National Journal of Primary Care

DOI: <https://doi.org/10.37184/lnjpc.2707-3521.7.12>

Mental health disorders pose a significant public health challenge in Pakistan, with high prevalence rates and adverse impacts on individual well-being and societal functioning. This abstract highlights key findings from available research on mental

disorders and mental health prevention in Pakistan, drawing upon relevant studies to inform future interventions and policy initiatives. Studies have identified common mental health disorders such as depression, anxiety, and post-traumatic stress disorder (PTSD) among the population, with intimate partner violence emerging as a significant risk factor for psychological distress. Psychological distress is also associated with physical morbidity, highlighting the interconnectedness of mental and physical health outcomes. Preventive interventions, including awareness campaigns, community-based programs, and access to mental health services, are essential to address the burden of mental illness and reduce stigma. These initiatives aim to promote early detection, increase help-seeking behavior, and provide timely support to needy individuals. However, further research and collaborative efforts are necessary to develop culturally appropriate interventions that address the unique challenges faced by individuals and communities in Pakistan and improve overall mental health outcomes.

The logo for HIRA features the word "HIRA" in a large, bold, blue sans-serif font. The letter "H" is partially filled with a yellow-to-white gradient, and the letter "R" is also filled with a yellow-to-white gradient. The background of the entire page is a soft-focus image of a traditional metal door handle.The logo for "promise of today & tomorrow" features the words "promise", "of today", and "tomorrow" in a white, lowercase, sans-serif font. The word "of" is smaller and positioned between "promise" and "today". The ampersand "&" is also in white. The letters "o" in "today" and "tomorrow" are filled with a yellow-to-white gradient, matching the style of the "H" and "R" in the HIRA logo above.