SCHOLARLY PUBLICATIONS
Kalinga Institute of Medical Sciences
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Journal Name: The Lancet Regional Health - Southeast Asia **IF: 6.2**

Title: A comprehensive assessment of health indicators among tribal populations in Odisha, India (Odisha Tribal Family Health Survey): a community-based, cross-sectional study

Author: Kshatri J.S.; AK K.; Rehman T.; Bhattacharya H.; Bhuyan D.; Mansingh A.; Sahoo U.K.; Nayak M.; Kanungo S.; Bhattacharya D.; Pati S.

Details: Volume 38, July 2025, Article number 100611

Abstract: Background: Indigenous tribal communities in the state of Odisha, eastern India, face persistent health disparities driven by socio-economic marginalisation, geographical isolation, and limited healthcare access. The Odisha Tribal Family Health Survey (OTFHS) aimed to comprehensively assess the health status, socio-demographic characteristics, and healthcare utilisation patterns of Odisha's tribal populations. Methods: A community-based survey was conducted between July 2022 and July 2023, covering 9711 households across 389 clusters in 14 tribal-dominated districts in Odisha. The study included 30,292 participants from 53 notified tribal groups. The study included participants of all age groups (from neonates to the elderly, aged 0 years and above), with 56% of the sample comprising females. Individuals belonging to one of the notified tribes who were permanent residents and provided written consent were included, while bedridden individuals and those with recognisable cognitive impairments were excluded. Data collection involved the use of structured tools at the household and individual levels, anthropometric measurements, point-of-care tests (including blood pressure, random blood glucose, and haemoglobin levels, as well as haemoglobinopathy screening), and laboratory analyses of blood serum samples (for liver function, kidney function, and lipid and iron profiles). Findings: OTFHS revealed that 88.0% of children aged 12–23 months were fully vaccinated and over 40% of children younger than five years were stunted or underweight. Anaemia affected 71.3% of children aged 6–59 months, with prevalence remaining high among adolescents (76.1% of females, 56.9% of males) and adults (77.5% of women, 42.1% of men). 93.0% of women had bank accounts and 91.4% of births occurred in healthcare facilities. Gaps persisted in antenatal care (40.3% completed four or more visits) and hygienic menstrual practices (35.8% of women).

URL: https://www.sciencedirect.com/science/article/pii/S2772368225000824?via%3Dihub

Journal Name: Diabetes, Obesity and Metabolism **IF: 5.7**

Title: Management of metabolic dysfunctionâ€“associated steatotic liver disease (MASLD)â€”An expert consensus statement from Indian diabetologists' perspective

Author: Zargar A.H.; Bhansali A.; Majumdar A.; Maheshwari A.; Bhattacharyya A.; Dasgupta A.; Saboo B.D.; Sethi B.K.; Sanyal D.; Seshadri K.G.; Deshpande N.R.; Kapoor N.; Lakhani O.J.; Talwalkar P.G.; Kalra P.; Mehrotra R.N.; Sahay R.K.; Shukla R.; Kant S.; Das S.; Agarwal S.C.; Phatak S.R.; Shanmugasundar G.; Joshi S.R.; Shaikh S.S.; Aravind S.R.; Goswami S.; Ghosh S.; Panikar V.K.; Mohan V.

Details: Volume 27, Issue S4, Pages 3 – 20, June 2025

Abstract: In India, the increasing prevalence of diabetes and obesity poses a significant threat towards a surge in the incidence of metabolic dysfunction-associated steatotic liver disease (MASLD), formerly known as non-alcoholic fatty liver disease (NAFLD). Concomitant with the evolving guidelines, there is a need to direct and spread awareness among practicing diabetologists to identify and screen high-risk individuals for MASLD for timely management. Its asymptomatic nature and the evolving guidelines on diagnosis have hindered the precise estimates of MASLD in the high-risk group of individuals in a clinical setting. Therefore, an expert panel of diabetologists from India convened to review, discuss and document the approach towards screening, diagnosis and management of MASLD. Serum biomarkers, simple non-invasive tools and imaging techniques could direct the risk stratification of the patients. Early lifestyle interventions including weight loss and exercise are beneficial. The pharmacological landscape of drugs directed to insulin resistance, lipid metabolism, oxidative stress, inflammation, apoptosis and fibrogenesis pathways for the management of MASLD is expanding. In summary, the consensus statements are expected to serve as a useful guide in the screening and management of MASLD in the region and to direct a well-planned study design that could enhance the scientific value of these statements.

URL: https://dom-pubs.pericles-prod.literatumonline.com/doi/10.1111/dom.16496

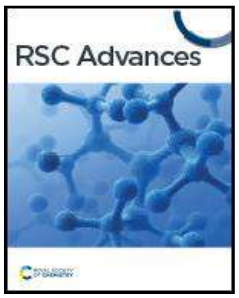
Journal Name: RSC Advances **IF: 4.6**

Title: Novel delivery strategy: finasteride-loaded solid lipid nanoparticles for improved androgenetic alopecia therapy

Author: Roy H.; Maddiboyina B.; Nayak B.S.; Bohara R.A.

Details: Volume 15, Issue 23, Pages 18715 – 18731, 4 June 2025

Abstract: Androgenetic alopecia (AGA) is currently the most prevalent cause of hair loss on the scalp. The daily administration of finasteride (FINA) by oral route may lead to the development of numerous undesirable systemic side effects. However, commercially available dermal dosage forms are available only with minoxidil; few studies have claimed severe side effects. Our study deals with the development of solid lipid nanoparticles (SLNs) of FINA with a suitable combination of l-α-phosphatidylcholine (LPC) and N-trimethyl chitosan (NTC) to overcome limitations along with good skin retention and hair growth. FINA-SLNs were developed using the ultrasonication technique and characterized further, along with hair growth observed in the animal model. The formulation NP7 showed the highest zeta potential value of −16.5 mV. The absence of the 00000000 00000000 00000000 00000000 11111111 00000000 11111111 00000000 00000000 00000000 NH peak in the ^{1}H-NMR spectra could be due to the protons attached, which have substantial exchangeability and result in a probable disappearance in the NMR spectra. The investigation showed the highest skin retention of 226.76 µg of FINA by NP7, along with a modest amount of FINA permeated (71.23 µg) during the study period of 18 h. The animal model using C57BL/6 mice showed a notable enhancement in hair covering and growth in Group IV, which received treatment without any visible cutaneous reaction on the skin. This outcome underscores the effectiveness and importance of the formulation developed using a suitable combination of LPC and NTC, which could be used to manage AGA effectively.



URL: https://pubs.rsc.org/en/content/articlelanding/2025/ra/d5ra00399g

SCHOLARLY PUBLICATIONS
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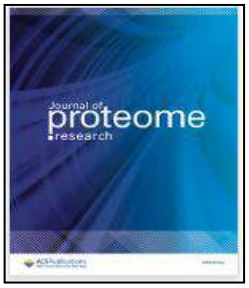
Journal Name: Journal of Proteome Research **IF: 3.6**

Title: Integrative Metabolomic and Lipidomic Signatures of SARS-CoV-2 VOCs: Correlations with Hematological and Biochemical Markers

Author: Baral B.; Saini V.; Singh S.; Verma T.P.; Rath D.K.; Bahinipati J.; Panda P.; Patro S.; Misra N.; Behera M.R.; Muduli K.; Parmar H.S.; Meena A.K.; Kumar R.; Agarwal S.; Mohapatra S.R.; Mohakud N.K.; Jha H.C.

Details: 19 May 2025, Article

Abstract: In the present study, we investigated biochemical, hematological, lipidomic, and metabolomic alterations associated with different SAR-CoV-2 variants of concern (VOCs), such as WT, α, β, γ, and δ, as well as their impact on COVID-19 severity. Across the first and second waves in India, a machine learning approach was used in 3134 COVID-19 patients, and nine critical biochemical and hematological parameters, namely, C-reactive protein (CRP), D-dimer, ferritin, neutrophil, WBC count, lymphocyte, urea, creatine, and lactate dehydrogenase (LDH), were identified. Furthermore, through metabolic and lipidomic profiles of lung and colon cells transfected with spike VOCs, notable dysregulation was exhibited by the delta variant correlated with characteristic pathways such as catecholamine and thyroid hormone synthesis. A corroborating meta-analysis also highlighted the involvement of urea and amino acid metabolism pathways. Overall, our study provides crucial insights into metabolic and biochemical disruptions caused by VOCs, contributing to a better understanding of COVID-19 pathogenesis and the development of targeted interventions.



URL: https://pubs.acs.org/doi/10.1021/acs.jproteome.4c00996

Journal Name: Immunologic Research **IF: 3.3**

Title: Sustainability, intelligence, and more immunology: time to get back to the future!

Author: Ahmed S.

Details: Volume 73, Issue 1, December 2025, Article number 3

URL: https://link.springer.com/article/10.1007/s12026-024-09554-w

SCHOLARLY PUBLICATIONS
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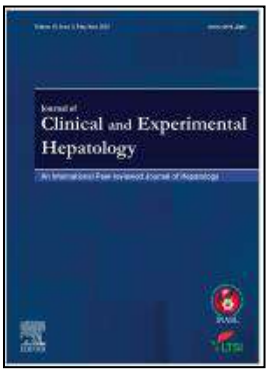
Journal Name: Journal of Clinical and Experimental Hepatology **IF: 3.3**

Title: Therapeutic Options for the Management of the Cholestatic Phase of Viral Hepatitis A and E-A Systematic Review

Author: Giri, S; Khatana, G; Gore, P; Praharaj, DL; Kulkarni, A; Anand, AC

Details: Volume 15, Issue 5, September–October 2025, 102557

Abstract: Background/Aims: The cholestatic hepatitis associated with acute viral hepatitis leads to prolonged jaundice and pruritus. While several treatment approaches have been proposed, there is a noticeable absence of agreement over the most effective course of action. The goal of this systematic review is to compile and assess the available data on treatment approaches for prolonged hepatitis associated with viral hepatitis. Methods: We comprehensively searched for relevant studies in MEDLINE, Embase, and Scopus from their inception to May 2024. Studies reporting the treatment option for the management of the cholestatic phase associated with viral hepatitis were included. Results: A total of 28 studies describing 164 patients were included in the review, of which 18 were case reports, 8 were case series, and 2 were interventional studies. The benefit of ursodeoxycholic acid (UDCA) was reported in two case reports, with doses varying from 10 to 30 mg/kg/d in the included studies. The use of corticosteroids in adult patients was reported in 21 studies, with prednisolone doses varying from 30 to 60 mg/day in adults. Two studies used nasobiliary drain (NBD) for patients who failed to respond to conventional therapy. Lastly, three studies reported using plasma exchange (PLEX) in patients refractory to standard treatment. Conclusion: Patients not responding to UDCA or cholestyramine may benefit from a short course of corticosteroids, suggesting an immune-mediated phenomenon. NBD placement or PLEX may be tried after analyzing the risk-to-benefit ratio for patients who are nonresponsive to corticosteroids. Further research is required to determine the optimal treatment strategy.



URL: https://www.sciencedirect.com/science/article/pii/S097368832500057X?via%3Dihub

SCHOLARLY PUBLICATIONS
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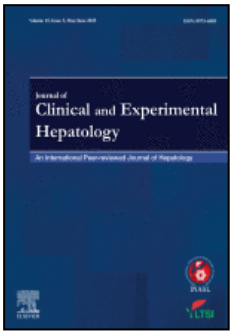
Journal Name: Journal of Clinical and Experimental Hepatology **IF: 3.3**

Title: Indian National Association for the Study of Liver (INASL) Guidance Statements for Determining

Author: Arora A.; Sharma P.; Kumar A.; Acharya S.K.; Sarin S.K.; Duseja A.; Puri P.; Shah S.; Chawla Y.K.; Rao P.N.; Saraya A.; Mohanka R.; Singh S.; Saighal S.; Rela M.; Vij V.; Asthana S.; Shukla A.; Bhangui P.; Saraf N.; Maiwall R.; Mandot A.; Saraswat V.; Madan K.; Shalimar; Kapoor D.; Anand A.C.; Gupta S.; Varghese J.; Mehta N.

Details: Volume 15, Issue 5, September–October 2025, 102539

Abstract: Liver transplantation (LT) is a life-saving procedure for patients with end-stage liver disease; however, with the growing shortage of organ donors, the need to identify futile transplants has become increasingly urgent. Futility in liver transplantation refers to situations where the expected post-transplant survival or quality of life is poor, making the procedure unlikely to yield a meaningful benefit. Various definitions of futility are used across different countries and transplant centers, with criteria often based on clinical factors such as age, comorbidities, MELD score, and functional status. For hepatologists and transplant surgeons, clearer guidelines are essential to make informed decisions and avoid unnecessary transplants that may place patients at risk without improving their prognosis. While some studies have proposed futility scores, there is currently no universal consensus on a standardized definition or set of criteria. This highlights the need for further prospective trials to evaluate the predictors of futility in liver transplantation, aiming to refine decision-making processes, optimize organ allocation, and improve patient outcomes. Future research should focus on the development of universally accepted futility criteria and explore interventions to mitigate the factors contributing to transplant futility.



URL: https://www.sciencedirect.com/science/article/pii/S0973688325000398?via%3Dihub

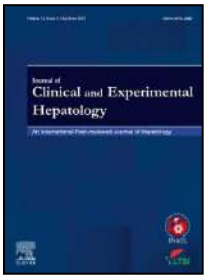
Journal Name: Journal of Clinical and Experimental Hepatology **IF: 3.2**

Title: Adoption of the New Nomenclature of Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) by the Indian National Association for Study of the Liver (INASL): Implications for the INASL Guidance Paper on NAFLD

Author: Duseja A.; De A.; Singh S.P.; Madan K.; Rao P.N.; Shukla A.; Choudhuri G.; Saigal S.; Shalimar; Arora A.; Anand A.C.; Das A.; Kumar A.; Eapen C.E.; Devadas K.; Shenoy K.T.; Panigrahi M.; Wadhawan M.; Rathi M.; Choudhary N.S.; Saraf N.; Nath P.; Kar S.; Alam S.; Shah S.; Nijhawan S.; Acharya S.K.; Aggarwal V.; Saraswat V.A.; Chawla Y.K.

Details: Volume 15, Issue 5, September–October 2025, Article number 102590

Abstract: The transition from nonalcoholic fatty liver disease (NAFLD) to metabolic dysfunction-associated steatotic liver disease (MASLD) reflects a paradigm shift in hepatology, emphasising metabolic dysfunction as the central driver in patients with MASLD. This inclusive terminology, endorsed by over 70 international organisations including the Indian National Association for Study of the Liver (INASL), reduces stigma of 'fatty and alcohol' and allows the co-existence of other liver disease etiologies along with MASLD. In the present commentary, we discuss the implications of the adoption of new nomenclature of MASLD on the INASL guidance paper on NAFLD, which was published in 2023, before the Delphi consensus on MASLD.



URL: https://www.sciencedirect.com/science/article/pii/S0973688325000908?via%3Dihub

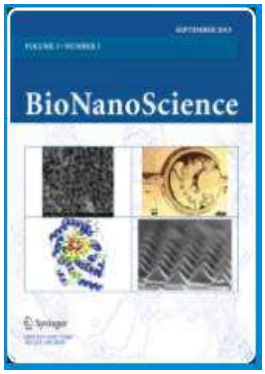
Journal Name: BioNanoScience **IF: 3.2**

Title: Etoricoxib Emulgel: In Vitro and Ex Vivo Characterization for Development of Novel Topical Formulationâ€"A Preclinical Study

Author: Sahoo S.; Nayak B.S.; Mohanty B.; Roy H.; Pradhan K.K.

Details: Volume 15, Issue 3, September 2025, Article number 325

Abstract: Emulgel is a novel topical formulation for the delivery of hydrophobic drugs. Etoricoxib is a cyclooxygenase II inhibitor by reducing the prostaglandins generation from Arachidonic acid. The present research aimed to formulate and develop an emulgel for the topical delivery of Etoricoxib for the management of inflammation. Emulgel was prepared by a combination of oil (Etoricoxib) and water phases in different proportions by homogenization. The drug excipient compatibility was confirmed by the FTIR study. The manufactured emulgels were characterized for pH, viscosity, drug content, spreadability, extrudability, bioadhesive, haemocompatibility, stability and drug diffusion as well as permeation studies. The optimized Etoricoxib emulgel was studied for skin irritation test and its potency to inhibit the inflammation by carrageenan-induced paw edema method. FTIR study revealed that Etoricoxib was compatible with excipients. The pH and viscosity of emulgels were found in the ranges of 5.5 to 6.2 and 2.2 to 2.8 × 10^4 cp. The drug content was more than 90% for all emulgels. As the oil amount was increased in emulgel, the spreadability was increased with good extrudability and bioadhesion properties. The emulgel was much potent to inhibit the inflammation as compared with the marketed gel. The emulgel containing 40 ml of olive oil at the 4:6 ratio of oil and aqueous phase (F4) was found to be haemocompatible and non-irritant to animal skin. The emulgel was stable at various storage conditions as per ICH guidelines. The emulgel (F4) diffuses and permeates (7.956 ± 0.97 and 1.591 ± 0.88% in 3 h) the drug in a more controlled and constant manner. Etoricoxib emulgel (F4 with oil and aqueous phase ratio of 4:6) was found to be the best emulgel formulation for the effective management of inflammation.



URL: https://link.springer.com/article/10.1007/s12668-025-01978-4

SCHOLARLY PUBLICATIONS
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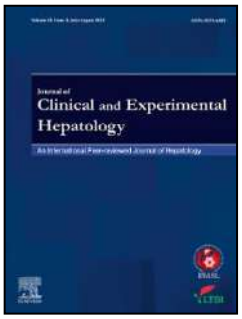
Journal Name: Journal of Clinical and Experimental Hepatology **IF: 3.2**

Title: Lifestyle Intervention is Effective in Reversal of Fibrosis in NAFLD Patients: Results from a Retrospective Real-World Study

Author: Singh S.P.; Anirvan P.; Chouhan S.; Panigrahi M.K.; Khatua C.R.; Hota S.; Rath M.M.; Kar S.K.; Misra B.; Nath P.; Sahu S.K.; Narayan J.; Singh A.

Details: Volume 15, Issue 6, November–December 2025, Article number 102598

Abstract: Background: Nonalcoholic fatty liver disease (NAFLD) is a lifestyle disorder, and lifestyle intervention (LI) remains the cornerstone of NAFLD management. Despite this, in recent years, the focus has been primarily on developing newer drugs and not on LIs, presumably due to a lack of medication adherence. We aimed to investigate the ability of LI to reverse fibrosis in NAFLD patients. Methods: Seven hundred seventy-six patients were retrospectively included, of which 565 patients were analysed. Anthropometric and biochemical parameters and 2D-SWE measurements of all patients were recorded before and after LI. Results: Weight reduction was observed in 85.2% of the patients. The mean body mass index (BMI) decreased from 26.08 ± 3.53 kg/m^2 to 25.06 ± 3.19 kg/m^2 (P < 0.001) in the cohort. The mean waist and hip circumferences decreased significantly from 98.87 ± 8.72 cm to 94.40 ± 7.67 cm and from 103.63 ± 7.91 cm to 101.98 ± 7.17 cm, respectively (P < 0.001). Significant reductions in serum low-density lipoprotein (112.93 ± 33.23 mg/dL to 104.12 ± 31.10 mg/dL, P < 0.001) and very low-density lipoprotein (34.05 ± 19.43 mg/dL to 30.26 ± 12.58 mg/dL, P < 0.001) levels were also observed post-intervention. Decrease in liver stiffness was observed in 67.9% of the patients, and a one-stage reduction in fibrosis was observed in 40.5% of the patients, while a 2-point reduction in liver stiffness was observed in 52% of the patients; reversal of hepatic steatosis occurred in 16.4% of the patients. A significant reduction in liver stiffness was seen post-intervention (7.21 ± 1.84 kPa to 6.61 ± 1.59 kPa, P < 0.001). BMI reduction correlated positively with a decrease in liver stiffness (r = 0.43, P < 0.001). Conclusion: LI when sustained over a year can improve liver stiffness in NAFLD, even in a real-world setting.



URL: https://www.sciencedirect.com/science/article/pii/S0973688325000982?via%3Dihub

SCHOLARLY PUBLICATIONS
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Journal Name: BMC Medical Education **IF: 3.2**

Title: Perceived stress and academic achievement among medical students with different chronotypes: a cross sectional study on first year medical students from India

Author: Manjareeka M.; Dasgupta S.; Kanungo P.; Das R.C.

Details: Volume 25, Issue 1, December 2025, Article number 723

Abstract: Background: Chronotype, which denotes an individual's preference for morning or evening activity patterns, has been linked to variations in cognitive performance, sleep behavior, and stress levels. This study investigates the association between chronotype, perceived stress, and academic performance among first-year medical students. Methods: A cross-sectional descriptive study was conducted among 148 medical students at a private university. Chronotype was assessed using the Munich Chronotype Questionnaire (MCTQ), and perceived stress was measured using the Perceived Stress Scale (PSS). Academic performance was categorized into "Excellent" (marks > 65%) and "Average" (marks < 55%). Statistical analyses included independent t-tests, chi-square tests to evaluate differences and associations. Results: Morning chronotypes demonstrated significantly higher academic performance, with 49.1% in the "Excellent" group compared to 29% of Evening chronotypes (p =.03). Perceived stress scores were significantly higher among Evening chronotypes (24.9 ± 12.1) than Morning chronotypes (20.7 ± 9.3, p =.028). Furthermore, Evening chronotypes exhibited longer sleep latency (41.17 ± 13.35 min vs. 14.49 ± 12.14 min, p <.001) and greater variability in weekend sleep schedules (p <.001). Gender differences in stress and academic performance were minimal and not statistically significant. Conclusion: Chronotype significantly affects academic performance and stress levels among medical students, with Morning types performing better academically experiencing less stress. Tailored strategies like flexible scheduling and sleep hygiene promotion can help Evening chronotypes overcome challenges, improving academic outcomes and psychological well-being.

URL: https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-025-07281-w

Journal Name: Indian journal of dermatology, venereology and leprology **IF: 3.2**

Title: Clinical and immunological predictors of chronicity in erythema nodosum

Author: Jain K.; Pradhan P.; Kumar Kar H.; Behera D.; Sukhija R.; Bajoria S.; Manocha G.; Ahmed S.

Details:

Abstract: Erythema nodosum (EN) is a painful inflammatory disorder of the subcutaneous fat and the most common type of septal panniculitis. It often presents as erythematous, tender subcutaneous nodules, typically affecting the shins. EN is frequently a hypersensitivity reaction that can serve as a warning sign for an underlying systemic disorder, making it crucial to identify the cause. Though self-limiting in many cases, EN can sometimes become chronic, leading to significant discomfort. The pathogenesis of EN and the predictors of chronicity remain unclear, necessitating further investigation. We conducted a prospective hospital-based study between July 2022 and June 2024 at a tertiary care centre in Eastern India. Clinical and histopathologically confirmed cases of EN presenting within 2-3 days of onset, without prior treatment, were enrolled. A detailed clinical examination and laboratory investigations were performed during the initial visit, including immunohistochemical analysis of skin biopsies. The total number of T cells (CD3+), helper T cells (CD4+), cytotoxic T cells (CD8+), CD4:CD8 ratio, and NK (natural killer) cells (CD56+) were quantified per skin biopsy specimen using a standardised technique. Patients were treated at the discretion of the treating physician. Patients were monitored monthly for three months and categorised as either having “Classic EN” (lesions resolving within three months) or “Chronic EN” (lesions persisting beyond three months). Data collected at the initial visit were correlated between the two groups to identify potential predictors of chronicity. Out of 63 suspected cases, EN was confirmed in 41 patients, who were predominantly females (65.85%), with a median age of 49 years (Q1 - Q3: 32 - 57). Pulmonary tuberculosis was the most frequent underlying condition (n = 15, 36.59%), followed by sarcoidosis (n = 8, 19.51%) and rheumatoid arthritis (n = 6, 14.63%). Chronic EN was observed in 36.59% of cases, with significantly elevated baseline C-reactive protein (CRP) levels ($p = 0.003$) and Mantoux test readings ($p = 0.002$). Immunohistochemistry revealed higher CD3, CD4, CD8, and CD56 levels in chronic EN cases ($p < 0.05$).

URL: https://ijdvl.com/clinical-and-immunological-predictors-of-chronicity-in-erythema-nodosum/

Journal Name: Journal of Public Health **IF: 3.1**

Title: Association of blood pressure with fasting blood glucose in Indian adults: a secondary data analysis of a clinical, anthropometric, and biochemical survey

Author: Panigrahi A.; Ray A.K.; Behera B.K.; Nayak S.

Details: Volume 33, Issue 6, Pages 1281 – 1286, June 2025

Abstract: Aim: Hypertension and diabetes continue to be among the major public health concerns worldwide, contributing to significant morbidity and mortality. The present study aimed to assess whether different blood pressure (BP) levels were associated with fasting blood glucose (FBG) levels using a national representative sample. Methods: A secondary data analysis was conducted using the data of an adult population from the state of Odisha, India, from the Clinical, Anthropometric, and Biochemical (CAB) survey (2014). The study population consisted of 54,477 adults aged between 18 and 70 years including 33,458 men and 21,019 women. Results: Quantile regression (QR) analysis was performed to identify associations of BP with FBG after adjusting for other confounding factors such as age, BMI, and Hb level. Distributions of systolic blood pressure (SBP) and diastolic blood pressure (DBP) were different according to sex. QR revealed that FBG was positively associated with SBP and DBP from the 10th percentile to 90th percentile ($p < 0.05$) in men and women. Conclusion: FBG is positively associated with BP in Indian adults.

URL: https://link.springer.com/article/10.1007/s10389-023-02112-y