

VOLUME 41, NUMBER 8  
August 2024

ISSN 0189 - 160X

---

# WAJMJ

---

**WEST AFRICAN JOURNAL OF MEDICINE**

ORIGINALITY AND EXCELLENCE IN MEDICINE AND SURGERY



**OFFICIAL PUBLICATION OF**  
THE WEST AFRICAN COLLEGE OF PHYSICIANS *AND*  
WEST AFRICAN COLLEGE OF SURGEONS



[www.wajmed.org](http://www.wajmed.org)



## TABLE OF CONTENTS

|   |     |
|---|-----|
| GENERAL INFORMATION   | IC  |
| INFORMATION FOR AUTHORS   | 1F  |
| EDITORIAL NOTE:   |     |
| From Prevention to Early Diagnosis: Tackling Acute Kidney Injury in Children, and Other Critical Health Challenges – G. E. Erhabor  | 843 |
| <b>ORIGINAL ARTICLES</b>  |     |
| <b>Evaluating the Factors Influencing Bacterial Vaginosis in Pregnant Women: An Analytical Cross-Sectional Study</b>  | 845 |
| O. M. Oyedeko, A. M. Olumodeji, A. A. Adewunmi, T. A. Ottun, K. A. Rabi   |     |
| <b>Prevalence of Acute Kidney Injury (AKI) in Children with Severe Malaria Using a Novel Biomarker: Serum Neutrophil Gelatinase Associated Lipocalin (NGAL) in Enugu</b>  | 853 |
| H. U. Okafor, N. Mbanefo, Ifeyinwa Nnakenyi, A. C. Ayuk, U. C. Nnajekwu, E. N. Ossai, J. M. Chinawa   |     |
| <b>Effectiveness of Monthly Versus Two-Dose Regimen of Sulphadoxine-Pyrimethamine for Intermittent Preventive Treatment of Malaria in Pregnancy in Southeastern Nigeria: A Randomised Controlled Trial</b>  | 860 |
| G. U. Odoh, P. U. Agu, E. O. Ugwu, C. C. Dim, S. N. Obi, J. E. Nnagbo, M. I. Eze, G. U. Eleje, K. E. Ekwuazi, A. O. Ugwu, P. C. Ekwueme, C. S. Anigbo   |     |
| <b>The Impact of Diabetes Self-Management Education (DSME) on the Quality of Life of patients living with type-2 Diabetes Mellitus in Nigeria</b>   | 868 |
| A. Osonuga, K. Olufemi, O. Osonuga, A. Osonuga, G. Okoye, A. Osonuga  |     |
| <b>The Pre-Fibroscan and Fibroscan Era: A Comparative Study of Histologic Diagnosis of Liver Biopsies</b>   | 874 |
| I. Emmanuel, C. Amaike, P. O. Akpa, B. V. Kwaghe, C. N. Ibeanu, P. Onoto, I. A. Othman, N. Z. Bahaushe, J. E. Ben, J. A. Emmanuel, S. J. Winnie, T. Leslie, T. N. Fadok, P. M. Davwar, A. S. Dahal, Y. D. Maktep, B. K. Adedeji, A. S. Longwap, A. I. Bawa, B. M. Mandong, D. E. Suleiman |     |
| <b>Assessment of School Counsellors' Knowledge and Attitude Towards Mental Illness and Suicide: A Pre-Intervention Survey</b>   | 879 |
| O. I. N. Buhari, B. W. Alatishe-Muhammed, M. M. Fasiku, F. N. BoluSteve, P. O. Annor  |     |
| <b>Pattern of Rheumatic Diseases in a New Rheumatology Clinic in Southwestern Nigeria. A Descriptive Study</b>  | 886 |
| G. J. Odunlami, A. Ajibade, H. B. Olaosebikan, T. A. Adetunji, A. A. Okoha, A. O. Idowu, A. O. Enitan, A. A. Sanusi, O. A. Akinyele, O. A. Omoyiola, U. C. Eke, A. Emorinken, O. O. Adelowo, G. E. Erhabor  |     |
| <b>Prevalence, Pattern and Factors Associated with Consumption of Sweetened Beverages Among Adolescents in Ogun State, Nigeria</b>  | 894 |
| A. Gbadebo, O. O. Sholeye, F. A. Gbadebo, H. A. Oladokun  |     |
| <b>REVIEW ARTICLE</b>   |     |
| <b>Chronic Complications of Diabetes Mellitus</b>   | 904 |
| R. N. Oputa, P. U. Oputa  |     |
| <b>INDEX TO VOLUME 41, NO. 8, 2024</b>  |     |
| Author Index  | 909 |
| Subject Index   | 910 |



### The Pre-Fibroscan and Fibrosan Era: A Comparative Study of Histologic Diagnosis of Liver Biopsies

*L'Ère Pré-Fibroscan et Fibrosan : Une Étude Comparative du Diagnostic Histologique des Biopsies Hépatiques*

<sup>1,2\*</sup>I. Emmanuel, <sup>3</sup>C. Amaike, <sup>1,2</sup>P. O. Akpa, <sup>1</sup>B. V. Kwaghe, <sup>1</sup>C. N. Ibeanu, <sup>1</sup>P. Onoto, <sup>1</sup>I. A. Othman, <sup>1</sup>N. Z. Bahausha, <sup>1</sup>J. E. Ben, <sup>1</sup>J. A. Emmanuel<sup>1</sup>, <sup>4</sup>S. J. Winnie, <sup>4</sup>T. Leslie, <sup>5</sup>T. N. Fadok, <sup>6</sup>P. M. Davwar, <sup>7</sup>A. S. Dahal, <sup>7</sup>Y. D. Maktep, <sup>8</sup>B. K. Adedeji, <sup>9</sup>A. S. Longwap, <sup>10</sup>A. I. Bawa, <sup>1</sup>B. M. Mandong, <sup>11</sup>D. E. Suleiman

#### ABSTRACT

**BACKGROUND:** The advancement in non-invasive methods for diagnosing and characterizing liver disease has achieved significant success. One such method, FibroScan, combines non-invasiveness, rapidity, painlessness, and reproducibility. However, its accuracy and value are limited in many clinical settings. The liver biopsy, the gold standard for assessing liver fibrosis offers direct visualization and provides extensive information through histology and ancillary investigations a noticeable gap of Fibroscan and other non-invasive methods.

**AIM AND OBJECTIVE:** To determine the rate of histology requests by gastroenterologists and surgeons at the Jos University Teaching Hospital during the pre-FibroScan era and the FibroScan era in the Jos metropolis.

**METHODOLOGY:** Patient biodemographic information and histologic diagnoses, along with the category of the requesting physician (gastroenterologist or surgeon) for liver biopsies, were extracted from hospital records. Data were collated for the pre-FibroScan era (2004-2010) and the FibroScan era (2011-2023), spanning 20 years. All patients with liver biopsies submitted for histologic analyses were included while those with inadequate biodemographic data, histologic diagnoses, and category of requesting physician were excluded.

**RESULTS:** Two hundred and eighteen (218) liver biopsies were received during the study of the period. Of these, two hundred and eight (95.4%) met the study criteria, with 111 (53.4%) from the pre-FibroScan era and 97 (46.6%) from the FibroScan era. In the pre-FibroScan era, 110 (99.09%) (0.01%) histology requested were by gastroenterologist and surgeons respectively, while in the Fibroscan era the respective requests by these specialties were 36 (37.11%) and 97 (62.89%). The first year of the Fibroscan era (2011) accounted for 22 (61.11%) of the 36 (100.00%) cases liver biopsies requested by gastroenterologist, with a corresponding value of 11 (16.67%) of 66 (100.00%) for surgeons. The significance concerning the requesting physician's specialty with p-value of 0.003.

**CONCLUSION:** For the foreseeable future, the FibroScan cannot replace the value of direct tissue histological assessment, especially where molecular studies and other ancillary investigations are crucial for targeted therapy and research. Histology remains the gold standard for the aforementioned reasons and probably will until the non-invasive investigations can provide the myriads of valuable information it avails. **WAJM 2024; 41 (8): 874-878**

**KEYWORDS:** Fibroscan, Liver, Biopsy, Gastroenterologist, Surgeon.

#### RÉSUMÉ

**CONTEXTE:** Les progrès dans les méthodes non invasives pour diagnostiquer et caractériser les maladies hépatiques ont permis d'atteindre des succès notables. L'une de ces méthodes, le FibroScan, combine non-invasivité, rapidité, absence de douleur et reproductibilité. Cependant, son exactitude et sa valeur sont limitées dans plusieurs contextes cliniques. La biopsie du foie, considérée comme la référence pour évaluer la fibrose hépatique, permet une visualisation directe et fournit des informations approfondies via l'histologie et des analyses auxiliaires, des éléments qui manquent au FibroScan et à d'autres méthodes non invasives.

**OBJECTIF:** Déterminer le taux de demandes d'histologie par les gastro-entérologues et les chirurgiens à l'hôpital universitaire de Jos pendant l'ère pré-FibroScan et l'ère FibroScan dans la métropole de Jos.

**MÉTHODOLOGIE:** Les informations biodémographiques des patients et les diagnostics histologiques, ainsi que la spécialité du médecin demandeur (gastro-entérologue ou chirurgien), ont été extraits des dossiers hospitaliers. Les données ont été collectées pour l'ère pré-FibroScan (2004-2010) et l'ère FibroScan (2011-2023), couvrant 20 ans. Tous les patients ayant subi des biopsies hépatiques soumises à des analyses histologiques ont été inclus, tandis que ceux dont les données biodémographiques, diagnostics histologiques ou spécialité du médecin demandeur étaient insuffisants ont été exclus.

**RÉSULTATS:** Deux cent dix-huit (218) biopsies hépatiques ont été reçues pendant la période de l'étude. Parmi celles-ci, 208 (95,4 %) répondaient aux critères de l'étude, dont 111 (53,4 %) de l'ère pré-FibroScan et 97 (46,6 %) de l'ère FibroScan. Pendant l'ère pré-FibroScan, 110 (99,09 %) demandes d'histologie provenaient de gastro-entérologues contre 1 (0,01 %) de chirurgiens. Pendant l'ère FibroScan, les demandes respectives étaient de 36 (37,11 %) pour les gastro-entérologues et 97 (62,89 %) pour les chirurgiens. La première année de l'ère FibroScan (2011) représentait 22 (61,11 %) des 36 (100,00 %) biopsies demandées par les gastro-entérologues, avec une valeur correspondante de 11 (16,67 %) des 66 (100,00 %) pour les chirurgiens. La spécialité du médecin demandeur montrait une signification avec une valeur de p de 0,003.

**CONCLUSION:** À l'avenir, le FibroScan ne peut remplacer la valeur de l'évaluation histologique directe des tissus, notamment lorsque des études moléculaires et d'autres investigations auxiliaires sont essentielles pour une thérapie ciblée et la recherche. L'histologie reste la référence en raison de ces raisons et le restera probablement jusqu'à ce que les investigations non invasives puissent fournir le large éventail d'informations précieuses qu'elle offre.

**WAJM 2024; 41 (8): 874-878**

**MOTS-CLÉS:** Fibroscan, Foie, Biopsie, Gastro-entérologue, Chirurgien.

<sup>1</sup>Department of Anatomic Pathology and Forensic Medicine, Jos University Teaching Hospital, Nigeria, Jos, Plateau State, Nigeria. <sup>2</sup>Department of Pathology, University of Jos, Jos, Plateau State, Nigeria. <sup>3</sup>Department of Community Medicine, Babcock University and Babcock University Teaching Hospital, Illishan Remo, Ogun State, Nigeria. <sup>4</sup>Department of Nursing Science, Babcock University and Babcock University Teaching Hospital, Illishan Remo, Ogun State, Nigeria. <sup>5</sup>Department of Histopathology, Federal Medical Center Jalingo, Taraba State, Nigeria. <sup>6</sup>Department of Medicine, Jos University Teaching Hospital, Nigeria. <sup>7</sup>Department of Medical Microbiology, Jos University Teaching Hospital, Nigeria. <sup>8</sup>Department of Histopathology, Federal University of Health Science Teaching Hospital Otuokpo. <sup>9</sup>Department of Chemical Pathology, Jos University Teaching Hospital, Nigeria, Jos, Plateau State, Nigeria. <sup>10</sup>Department of Chemical Pathology, Abubakar Tafawa Balewa University Teaching Hospital, Nigeria, Bauchi, Bauchi State, Nigeria. <sup>11</sup>Department of Histopathology, Abubakar Tafawa Balewa University Teaching Hospital, Nigeria, Bauchi, Bauchi State

**Correspondences:** Dr. Innocent Emmanuel, Department of Anatomic Pathology and Forensic Medicine, Jos University Teaching Hospital, and Department of Pathology, University of Jos, Jos, Plateau State, Nigeria. P.M.B. 2084, Jos. E-mail: kinapele58@yahoo.com