

VOLUME 40, NUMBER 12
December 2023

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



TABLE OF CONTENTS

GENERAL INFORMATION	IC
INFORMATION FOR AUTHORS	1F
EDITORIAL NOTE: <i>Healthcare Delivery in West Africa: Threats and Opportunities</i>	1283
ORIGINAL ARTICLES	
A Non-Inferiority Study of Combination of Latanoprost and Timolol Formulation to Their Separate Use in Drug-Naive Primary Open Angle Glaucoma and Ocular Hypertension Nigerian Patients (RCT 93803536 Nigeria Clinical Trial Registry)	1285
O. P. Abikoye, O. O. Abesin, O. O. Onabolu, H. A. Ajibode, F. G. Adepoju, R. O. Musibau	
Association between Alanine Aminotransferase, Hypertension and Obesity in Nigerians	1291
B. F. Dele-Ojo, S. A. Dada, J. O. Fadare, D. D. Ajayi, E. A. Ajayi, T. H. Raimi, A. O. Ajayi	
Breast Cancer Stage at Diagnosis in a Nigerian Hospital: Trend over a Decade	1298
O. Olasehinde, A. Aderounmu, F. Wuraola, A. Omisore, A. Akinkuolie, A. Towoju, T. Mohammed, V. Mango, P. T. Kingham, A. Adisa, IO. Alatisé	
Impact of Seasonal Changes on Asthma Control in North-Western Nigeria	1304
A. Abbas, J.U. Okpapi, C.H. Njoku, A.A. Abba	
Eswatini Women’s Knowledge about Cervical Cancer, Data from a Prevention and Awareness Campaign 2021: A Community Based Cross-sectional Campaign	1311
T. Maseko, J. M. Tsoka-Gwegweni, J. Ndirangu, V. Okello, X. Dlamini, N. Mkhumane, B. Vilane, B. Mthetwe	
Factors that Influence the Acceptance of Needle Biopsy of the Liver at a Tertiary Hospital in Nigeria	1317
O. Adekanle, O.J. Kolawole, O. Ijarotimi, D.A. Ndububa	
Knowledge and Perceptions of Cervical Cancer Screening in Nhlambeni, Eswatini: Understanding Facilitators and Barriers for Prevention Interventions	1325
T. Maseko, Joyce M. Tsoka-Gwegweni, J. Ndirangu, Velephi Okello, Xolisile Dlamini	
Adverse Drug Reactions and Changes in Haematological and Clinical Chemistry to Two Acts among Nigerian Children with Acute Uncomplicated Malaria	1332
O. E. Anjorin, I. A. Anjorin, C. O. Falade	
Precise Pediatric Cancer Diagnosis Using Immunohistochemistry: Reducing Cost of Care and Improving Outcomes in a Low and Middle-Income Setting	1341
A. M. Akinsete, U. O. Fakile, O. A. Joseph, A. O. Akinjo, T. O. Fashola, A. T. Oladipo, A. Akinsulie	
Prevalence and Factors Associated with Stress, Anxiety and Depression amongst Primary Care Patients with Hepatitis B and C Infections in Nigeria	1347
R. A. Barminas, A. J. Fatusin, S. Ateya, E. Ogwuche, P. S. Kla, M. J. Barminas, M. M. Gaspard, P. O. Ameh	
Seroprevalence of Hepatitis B and C Virus Infections among Healthcare Seekers at a Tertiary Health Facility in North-Central Nigeria: A Retrospective Study	1355
J. Onubi, P. Eseigbe, J. P. A. Agyema, A. A. G. Chima	
Sexual Maturation of Female Adolescent Patients with Sickle Cell Anaemia in Lagos, Nigeria	1362
C. H. Ananti, E. E. Oyenusi, A. O. Oduwole, E. O. Temiye, O. F. Njokanma	
Side Effects of Permanent Radioactive Iodine-125 Implants Brachytherapy for Prostate Cancer in Nigeria	1369
O. F. Adeyemi, E. Bentefour	
CASE REPORT	
Challenges to Thrombolysis in A Resource-Poor Setting- A Case Report	1378
A. F. Ogunmodede, A. A. Sanusi, A. O. Idowu, U. C. Eke, A. S. Aderibigbe, M. B. Fawale, M. A. Komolafe	
From the Breast to the Finger - A Case Report of Acrometastasis	1383
I. O. Ita , B. Mustapha , A. O. Adesunkanmi , A. A. Aderounmu, A. A. Adefidipe , A. S. Aderibigbe , F. O. Wuraola	
INDEX TO VOLUME 40, NO. 12, 2023	
Author Index	1387
Subject Index	1388



Sexual Maturation of Female Adolescent Patients with Sickle Cell Anaemia in Lagos, Nigeria

Maturation sexuelle des adolescentes atteintes de Anémie falciforme à Lagos, Nigéria

¹C. H. Ananti, ^{2*}E. E. Oyenusi, ²A. O. Oduwale, ³E. O. Temiye, ⁴O. F. Njokanma

ABSTRACT

BACKGROUND: Sickle cell anaemia (SCA) has been shown to have adverse effects on growth and sexual development. Recent Nigerian studies have reported a declining trend in the age of sexual maturation and menarche in haemoglobin AA (HbAA) individuals.

OBJECTIVE: To evaluate the sexual maturation of female patients with SCA aged 10 to 19 years seen at Lagos University Teaching Hospital Idi-Araba, Lagos and Sickle Cell Foundation.

METHODS: It was a cross-sectional study involving 140 girls with SCA (subjects) and an equal number of girls with HbAA (controls) who were matched for age and socio-economic class over a five-month period. The evaluation involved anthropometry, calculation of BMI and determination of breast and pubic hair development using Tanner staging.

RESULTS: The mean BMI for the subjects was 17.2 ± 2.39 kg/m² and 20.2 ± 3.09 kg/m² for the controls ($p < 0.001$). The mean age at onset of breast development (B2) was 13 ± 0.39 years in the subjects and 10.5 ± 0.51 years in the controls ($p < 0.001$). The corresponding mean age for pubic hair development (PH2) was also higher at 13.8 ± 0.59 years for the girls with SCA and 10.4 ± 0.51 years for the controls ($p < 0.001$), while menarche was achieved in the subjects at 14.7 ± 1.68 years and in the controls at 12.3 ± 1.33 years ($p < 0.001$). Upper socioeconomic class was associated with earlier menarche and faster transition from pre-pubertal stage to pubertal stage of sexual maturation in the controls but was not observed in the SCA subjects.

CONCLUSION: Sexual maturity in patients with SCA lagged behind those of the HbAA controls.

WAJM 2023; 40 (12): 1362 - 1368

KEYWORDS: Haemoglobin SS, Sexual maturity, Menarc

RÉSUMÉ

CONTEXTE: Il a été démontré que la drépanocytose (ACS) a un effet néfaste sur la croissance et le développement sexuel. Des études nigérianes récentes ont rapporté une tendance à la baisse de l'âge de maturation sexuelle et de la ménarche chez les individus hémoglobine AA (HbAA).

OBJECTIF: Évaluer la maturation sexuelle de patientes atteintes d'ACS âgées de 10 à 19 ans vues à l'hôpital universitaire de Lagos Idi-Araba, Lagos et à la Fondation drépanocytaire.

MÉTHODOLOGIE: Il s'agissait d'une étude transversale portant sur 140 filles atteintes d'ACS (sujets) et un nombre égal de filles atteintes d'AAb (témoins) qui ont été appariées pour l'âge et la classe socio-économique sur une période de cinq mois. L'évaluation comprenait des mesures anthropométriques, le calcul de l'IMC et la détermination du développement des poils mammaires et pubiens à l'aide de la stadification Tanner.

RÉSULTATS: L'IMC moyen pour les sujets était de $17,2 \pm 2,39$ kg/m² et de $20,2 \pm 3,09$ kg/m² pour les témoins ($p < 0,001$). L'âge moyen au début du développement mammaire (B2) était de $13 \pm 0,39$ ans chez les sujets et de $10,5 \pm 0,51$ ans chez les témoins ($p < 0,001$). L'âge moyen correspondant pour le développement des poils pubiens (PH2) était également plus élevé à $13,8 \pm 0,59$ ans pour les filles atteintes d'ACS et à $10,4 \pm 0,51$ ans pour les témoins ($p < 0,001$) tandis que la ménarche a été atteinte chez les sujets à $14,7 \pm 1,68$ ans et chez les témoins à $12,3 \pm 1,33$ ans ($p < 0,001$). La classe socio-économique supérieure a été associée à une ménarche plus précoce et à une transition plus rapide du stade prépubertaire au stade pubertaire de maturation sexuelle chez les témoins, mais n'a pas été observée chez les sujets SCA.

CONCLUSION: La maturité sexuelle chez les patients atteints d'ACS était inférieure à celle des témoins de l'HbAA.

WAJM 2023; 40 (12): 1362 - 1368

MOTS CLÉS: Hémoglobine SS, Maturité sexuelle, Ménarche

¹Department of Paediatrics, Lagos University Teaching Hospital, Idi-Araba. ²Endocrinology and Metabolism Unit, Department of Paediatrics, College of Medicine, University of Lagos/Lagos University Teaching Hospital, Lagos Nigeria. ³Haematology and Oncology Unit, Department of Paediatrics, College of Medicine, University of Lagos/Lagos University Teaching Hospital, Lagos Nigeria. ⁴Department of Paediatrics, Lagos State University College of Medicine /Lagos State University Teaching Hospital, Ikeja.

Correspondence: Dr. Oyenusi Elizabeth Eberechi, Endocrinology and Metabolism Unit, Department of Paediatrics, College of Medicine, University of Lagos/Lagos University Teaching Hospital, Lagos Nigeria. Email: ebikike@yahoo.com

Abbreviation;

SCA: Sickle cell anaemia; **HbSS:** Haemoglobin genotype SS; **HbAA:** Haemoglobin genotype AA; **LUTH:** Lagos University Teaching Hospital; **SCF:** Sickle Cell Foundation; **SEC:** Socio-economic class; **BMI:** Body mass index; **B1-B5:** Tanner stages of Breast one to five; **PH1-PH5:** Tanner stages of Pubic Hair one to five; **ANOVA:** Analysis of variance; **PCV:** Packed cell volume