

VOLUME 38, NUMBER 3
MARCH 2021

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

WEST AFRICAN JOURNAL OF MEDICINE

ISSN 0189 – 160X

Volume 38

Number 3

March, 2021

ORIGINAL ARTICLES

An Audit of Orthodontic Retention Protocol in a Tertiary Health Institution: A 3-Year Retrospective Study

O. D. Umeh, I. L. Utomi, A. L. Ben-Okoye, A. S. Eniola

Comparing Antenatal and Delivery Care Services in Public and Private Health Facilities: Evidence from 2018 Nigeria Demographic and Health Survey

M. S. Ibrahim, Z. Babandi, I. Joshua, S. Asuke

Determinants of Antimicrobial Use for Covid-19 Related Symptoms among Nigerians

E.E. Chukwu, A.Z. Musa, C. Enwuru, A. Ohihion, T. Bamidele, A. Olukosi, I. Idigbe, K.A. Osuolale, C. Gab-Okafor, A. Salako, O. David, N. Otuonye, A. David, R. Toyosi, O. Aina, B. Adewale, N. N. Odunukwe, O. Ezechi, R.A. Audu, B.L. Salako

Evaluation of Foetal Haemoglobin Status among Nigerian Patients with Sickle Cell Anaemia Using High Performance Liquid Chromatography

N. I. Ugwu, N. E. Okechukwu, C. N. Ugwu, O. E. Ogah, C. Okike, R. C. Ikeagwulonu, N. U. Uzodinma, A. J. Madu, H. C. Okoye, I. C. Uzoma, C. Alo, G. C. Ugwu, V. N. Ekpeagu, U. I. Okeke

Hospital-Based Cross-Sectional Study of the Impact of Cutaneous Lichen Planus on the Quality of Life of Patients at a Tertiary Center in Lagos, Nigeria

E. L. Anaba, R. I. Oaku

Hypertension and its Clinical Correlates in a Rural Community in South Western Nigeria

O. O. Oni, P. O. Akinwusi, A. O. Odeyemi, G. M. Israel, O. Ala, J. O. Akande, E.O. Oke, A. Durodola, A. Idowu, O. K. Israel, A. O. Aremu

Relevance of Rheumatic Valvular Heart Disease in the Aetiology of Heart Failure in Contemporary Times

E. J. Ogbemudia, E. M. Umuerrri

Menstrual Characteristics of sub-Sahara Black African Women with and without Endometriosis

I. Jalo, E. W. Isaac, M. P. Raymond, M. Amina, R. Y. Adeniji

Plasma Low-Density Lipoprotein Cholesterol Estimated by Friedewald Compared to Martin-Hopkins Equation in Nigerian Population

B. E. Orimadegun, F. Ogah, O. B. Oyedele, O. O. Daodu

Prevalence and Correlates of Frailty Syndrome among Older Adults Attending Chief Tony Anenih Geriatric Centre, University College Hospital, Ibadan

S. A. Ajayi, L. A. Adebuseye, O. O. Olowookere, R. O. Akinyemi, K. O. Afolayan, J. O. Akinyemi, E. O. Labaeka

The Evolving Application of DNA-Based Genotyping of Red Blood Cells in Blood Grouping: A Narrative Review

T. O. Akinyemi, F. A. Fasola, O. A. Olateru-Olagbegi

Predictors of Bacterial Co-Infection and Outcome in Children with Severe Malaria in Ilorin, Nigeria

A. Ojuawo, O. Mokuolu, A. Adegboye, O. Ojuawo, M. Abdulkadir, B. Olanipekun, A. Jimoh, O. Adedoyin

CASE REPORTS

Rosai-Dorfman Disease in Cervical Lymph Nodes: The Challenges of Diagnosis in a Resource Limited Setting and Use of Immunohistochemistry in the Diagnosis

G. O. Ogun, B. L. Awosusi, A. A. Oladeji

Induced Membrane Technique of Masquelet; A Viable Option in Treatment of Post-Trauma Segmental Bone Loss: A Case Report

F. S. Ejagwulu, K. E. Amaefule, Y. Z. Lawal, I. L. Dahiru, I. M. Maitama, I. Aniko, S. S. Audu, E. E. Ejagwulu

Impact of Impaired Kidney Function on Outcomes of Nigerians with COVID-19 Infection: Report of two Cases from the University College Hospital, Ibadan

Y. R. Raji, S. O. Ajayi, B. I. Abiola, T. Augustine, O. Adekanmbi, A. Arije

See full Table of Contents in English (Page 1A) and French (Page 1B)

PUBLISHED BY
THE WEST AFRICAN COLLEGE OF PHYSICIANS
AND
THE WEST AFRICAN COLLEGE OF SURGEONS



Relevance of Rheumatic Valvular Heart Disease in the Aetiology of Heart Failure in Contemporary Times

Pertinence de la Cardiopathie Valvulaire Rhumatismale dans L'étiologie du Cœur L'échec à L'époque Contemporaine

E. J. Ogbemudia*[†], E. M. Umuerrri[‡]

ABSTRACT

BACKGROUND: Rheumatic valvular heart disease (RVHD) is one of the foremost causes of heart failure (HF) in our population, particularly among young adults, but a decline in the prevalence of RVHD has been observed. The effect of this decline on the relevance of RVHD among other causes of HF is not established in our setting.

OBJECTIVE: To determine whether RVHD is still a leading cause of HF in our population or not.

METHODS: This was a retrospective study of HF patients hospitalized between August 2018 and June 2020. The demographic features, blood pressure, aetiology of HF and ejection fraction were retrieved from the unit's HF register. Data were presented as frequencies and medians. Associations were tested as appropriate.

RESULTS: RVHD accounted for 78 (35.5%) of HF, with a median age of 47 years. The young and middle-aged subgroups were 10(12.8%) and 48(61.6%), respectively. The affected valves were all regurgitant and 68 (77.2%) had definite RVHD. Isolated mitral valve, combined mitral and aortic valves were affected in 40 (51.3%) and 22 (28.2%), respectively. The median systolic blood pressure and ejection fraction were 110mmHg and 26% respectively. RVHD was associated with HF with reduced ejection fraction. (P value < 0.001)

CONCLUSION: RVHD remains one of the leading causes of HF (35.5%) among adults in our population. Young adults are now in the minority and most patients present late in the course of the disease. Valve surgery should be made readily accessible. Primary and secondary prevention of acute rheumatic fever should be reinforced. *WAJM 2021; 38(3): 241–245.*

Keywords: Heart failure, aetiology, Rheumatic valvular heart disease.

ABSTRAIT

CONTEXTE: La cardiopathie valvulaire rhumatismale (RVHD) est l'une des principales causes d'arrete cardiaque (IC) dans notre population, en particulier chez les jeunes adultes, mais une baisse de la prévalence du RVHD a été observée. L'effet de ceci le déclin de la pertinence de la RVHD parmi les autres causes d'IC est pas établi dans notre environnement.

OBJECTIF: Déterminer si ou non la RVHD est toujours une cause de l'IC dans notre population

MÉTHODES: Il s'agissait d'une étude rétrospective de patients atteints d'ICHospitalisé entre août 2018 et juin 2020. Les caractéristiques démographiques, tension artérielle, étiologie de l'IC et les fractions d'éjection ont été extraites du registre HF de l'unité.

Les données ont été présentées sous forme de fréquences et de médianes. Les associations ont été testés le cas échéant.

RÉSULTATS: Le RVHD représentait 78 (35,5%) de l'IC, avec une médiane âge de 47 ans. Les sous-groupes jeunes et d'âge moyen étaient 10 (12,8%) et 48 (61,6%), respectivement. Les valves affectées étaient tous régurgitants et 68 (77,2%) avaient un RVHD défini. La valve mitrale isolée, les valves mitrale et aortique combinées étaient touchés dans 40 (51,3%) et 22 (28,2%), respectivement. La la pression artérielle systolique médiane et la fraction d'éjection étaient 110 mmHg et 26% respectivement. Le RVHD était associé à HF avec fraction d'éjection réduite. (Valeur P < 0,001)

CONCLUSION: Le RVHD reste l'une des principales causes de HF (35,5%) chez les adultes de notre population. Les jeunes adultes sont maintenant dans la minorité et la plupart des patients se présentent tard dans le cours de la maladie. La chirurgie valvulaire doit être rendue facilement accessible. Prévention primaire et secondaire de la fièvre rhumatismale aiguë devrait être renforcée. *WAJM 2021; 38(3): 241–245.*

Mots clés: Arrete cardiaque, étiologie, cœur valvulaire rhumatismal maladie.

Departments of [†]Medicine, College of Medical Sciences, University of Benin/Teaching Hospital, Benin City, Edo State, Nigeria; [‡]Faculty of Clinical Medicine, Delta State University, Abraka; and Department of Medicine, Delta State University Teaching Hospital, Oghara, Delta State, Nigeria.

*Correspondence: Dr. E. J. Ogbemudia, Department of [†]Medicine, College of Medical Sciences, University of Benin/Teaching Hospital, Benin City, Edo State, Nigeria. Email: ogbemudiaehi@yahoo.com Phone: 234 8023398438

Abbreviations: BP, Blood Pressure; HFmrEF, Heart Failure with Midrange Ejection; HFpEF, Heart Failure with Preserved Ejection Fraction. HFrEF, Heart Failure with Reduced Ejection; HHD, Hypertensive Heart Disease; LVEF, Left Ventricular Ejection Fraction; RVHD, Rheumatic Valvular Heart Disease.