Abstract

Abstract

Abstracts Presented at the Benin 2022 MDCAN NEC

1. The Monitoring of Patients on Antipsychotics in a Nigerian Teaching Hospital

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Background: Antipsychotics are now known to be associated with adverse conditions such as arrhythmias, hyperprolactinemia, and metabolic dysfunction.[1] Consequently, the need to monitor patients on antipsychotics for cardiovascular and other risk factors has continued to draw attention.[2] The use of antipsychotics needs to be regulated by the findings of baseline and subsequent investigations.[3] Some studies have reported poor compliance with the monitoring.[3-5] As important as the subject matter is, there is a severe paucity of study that has examined the monitoring of patients on antipsychotics in Nigeria. Thus, the study was carried out to investigate the monitoring of patients on antipsychotics in the Department of Mental Health of University of Benin Teaching Hospital, Benin City, Nigeria. **Methods:** After obtaining the relevant permissions, data were obtained from the case files of 39 patients who were seen for the first time between June 15, 2020, and December 15, 2020, who were put on antipsychotics and were on follow-up for at least 16 weeks. **Results:** Majority of the patients were females (21{53.8%}). The age range was from 19 to 67 years, and majority of them were 36 to 51 years old (38.5%). Most of them were of the Bini tribe (41.1%), and almost all of them were Christians (97.4%). 53.8% were single, while about half were employed (51.2%) The most common diagnosis was mood disorder. Only 17.9% of the participants had their pulse rate taken at baseline. At subsequent presentations, it dropped to 2.6%. Blood pressure check was similar to that of pulse rate, as only 20.5% of the patients had their blood pressure measured at the initiation of therapy, dropping to 2.6% after the 6th and 13th week. 43.6% of the respondents had their weight measured at the initiation of therapy, with a slight increase to 46.2% after the 6th week and then dropped remarkably to about 25.6% after the 13th week. It is important to note that other salient variables such as height, body mass index, and abdominal girth were not measured. Only five (12.8%) of the participants had their blood investigations done at the initiation of treatment. There was no significant association between gender and having the blood pressure of the participants checked. Although, more females had their blood pressure not checked (83.3%) compared to the males (77.3%). Majority of the patients in the group 52–67 years (85.7%) did not have their blood pressure checked. However, there was no significant association between age and having blood pressure of the participants checked. **Conclusion:** The monitoring of patients on antipsychotics was poor. All hands must be on deck to reverse this trend.

2. Evaluation of Dyselectrolytemia in Acutely Ill Children Seen in the Emergency Room of a Referral Hospital in Southern Nigeria

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Background: Dyselectrolytemia is common in acutely ill children, especially in the younger age group. Fluid and electrolyte disorders involving sodium, potassium, bicarbonate, and chloride often occur together depending on the underlying causes. Apart from gastrointestinal disorders, other organ systems can be involved in electrolyte disorders including respiratory and central nervous systems dysfunction. This highlights the multi-factorial etiology of dyselectrolytemia. Dyselectrolytemia leads to significant morbidity and mortality in the emergency setting if not corrected promptly. Hyponatremia and hypernatremia can lead to life-threatening central nervous system complications including cerebral oedema, osmotic demyelination syndrome, and cerebral venous sinus thrombosis, especially when associated with sepsis. Considering the foregoing, detecting dyselectrolytemia early will improve the outcome of critically ill children. We assessed the incidence, predisposing factors, and outcome of dyselectrolytemia among acutely ill children seen in the emergency room. **Methods:** This study adopted a descriptive, cross-sectional design. Clinical and socio-demographic data of the children were collected with a semi-structured questionnaire, and their serum electrolytes were measured using Ion Selective Electrodes (ISE). Dyselectrolytemia was defined as ≥1 abnormal serum electrolyte levels. Descriptive analysis identified the incidence of dyselectrolytemia. Bivariate analysis was performed to identify variables associated with dyselectrolytemia and poor outcome among the participants. This study was done as a part of an acute kidney injury research; ethical clearance was obtained from the Research and Ethics Committee of the College of Medical Sciences, University of Benin. **Results:** A total of 259 acutely ill children took part in the study. They had a mean ± SD age of 4.3 ± 5.0 years and mean weight 16.8 ± 14.3 kg. There were 132 (51.0) females and 127 (49.0) males. Over a quarter (26.3%) of them were in lower socioeconomic class, 52.5% in the middle and 21.2% in the upper class. The most common diagnosis among the participants was severe malaria (42.9%); others were meningitis (22.8%), gastro-enteritis (15.4%), and severe sepsis (12.4%). The outcomes of the participants were as follows: discharges 210 (81.1%), deaths 46 (17.8%), and left against medical advice 3 (1.1%). The overall incidence of dyselectrolytemia was 85.7%. Forty-five participants (17.4%) had one electrolyte derangement, and 136 (52.5%) had two or more electrolyte abnormalities. The most common abnormality found in this study was acidosis (68.7%), closely followed by dysnatremia (67.2%) and dyskalemia (37.1%). Severe hyponatremia was present in 16.6% of the participants, hypernatremia in 4.2%, severe hypokalemia in 2.7%, and hyperkalemia in 12.7%. There was an association between duration of illness and dyselectrolytemia ($p = 0.034$). Also, there was a significant difference age in years of children with and without dyselectrolytemia (*4.33 ± 5.02 vs. 3.91.*

± *4.94; p = 0.011*). Dysnatremia was significantly associated with a poor outcome among them ($x^2 = 5.724$, *p = 0.017*). **Conclusion:** Dyselectrolytemia is common among acutely ill children with significant impacts on their outcome. There is a need for serum electrolyte monitoring and prompt correction of any imbalance in the emergency setting.

3. Prevalence and Outcome of Total Abdominal Hysterectomy Performed for Cervical Intraepithelial Neoplasia at the University of Benin Teaching Hospital

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Background: Cervical cancer is the most common malignancy of the female genital tract in developing countries of the world. It is a preventable disease with a precursor lesion; cervical intraepithelial neoplasia (CIN) which can be detected early via screening methods and treated to prevent its progression to invasive cancer. However, incidence and death continue to rise in developing countries due to lack of organized screening procedures unlike in the developed countries with organized screening programs. The management of CIN can be by ablative or excisional treatments which are simple outpatient procedures. However, total abdominal hysterectomy (TAH), a major surgery that is considered an over treatment in developed countries with organized cervical cancer screening programs, is one of common methods that is still practiced in developing countries without an organized prevention program. This research is an audit of its use in our center and explores the surgical outcome of TAH performed for CIN. We aimed to document how often CIN is the primary indication for TAH in UBTH and to also compare the pattern of complications between TAH performed for CIN and TAH performed for other benign gynecological conditions, the outcome of surgery and observed complications. **Methods:** This was a retrospective cross-sectional analytical study carried out on 145 women who had TAH for benign gynecological conditions from January 2015 to December 2019 at UBTH. Relevant data were extracted from the case notes and hospital records. Analysis was performed using SPSS version 22 and data presented as frequency tables and charts as appropriate. Chi square and T test were used to compare differences between TAH for CIN to that for other benign gynecological conditions. Ethics approval was obtained. **Results:** A total of 145 cases of TAH were analyzed. Uterine fibroid was the most common indication for TAH (51%) followed by endometrial hyperplasia 22.8%. CIN was the indication for TAH in 17.2% of the women TAH in this study. The most common adverse surgery outcome was hemorrhage, followed by prolonged hospital stay. However, there were no significant differences in the pattern of complications observed between TAH performed for CIN compared to other benign gynecological conditions. **Conclusion:** CIN remains a common indication for TAH performed for benign gynecological conditions at UBTH. There were no significant differences observed in the pattern of complications from TAH performed for other benign gynecological conditions. This may represent a service delivery gap and indicates a need to make other less invasive ablative and excisional treatment methods for CIN such as thermal ablation and LEEP more available and accessible.

4. Approaches Adopted for Coping with Dental Pain Among a Population of Nigerians

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Background: Pain is a common disabling condition with a high effect on health and health services, with its alleviation regarded as high priority care in dental and medical practice worldwide. Conventional management of dental pain involves getting the professional care that involves the diagnosis of the condition causing the pain and appropriate dental treatment. However, many of the world's developing countries tend to have very frail healthcare systems and inadequate resources to satisfy the very basic health needs of their citizenry. This study aims to determine the practices adopted for coping with dental pain among a population of adults residing in three different communities in Edo State, Nigeria. **Methods:** This was a cross-sectional study of adult residents in three different communities in Edo State. The communities were classified using the Office for National Statistics; 2011 rural/urban classification into rural, semi-urban, and urban communities. The communities were picked from the three local government areas (LGA) that make up Benin City (Oredo, Ikpoba-Okha, and Egor). Data for the study were collected using an interviewer-administered questionnaire. The questionnaire sought information on socio-demographic characteristics of the participants, dental pain experience, and practices adopted for coping with dental pain. All collated data were screened for completeness and analyzed using IBM SPSS version 21.0. **Results:** A total of 165 participants were recruited for the study with age ranging from 15 to 99 years with a mean age 38.48 ± 16.9 years. The age group with the highest presentation was 15 to 30 year olds. Females accounted for 61.8% giving a male–female ratio of 1:1.6. The participants were drawn from three different communities, with 47.3% drawn from a rural community, and a higher percentage of the participants were unskilled workers and dependents. The majority (n = 136, 82.4%) of the respondents had experienced dental pain. The most common practice adopted for coping with dental pain was self-medication using over-the-counter (OTC) drugs accounting for 64.7%, while 12.5% of the participants claimed to have borne the pain and did nothing about it. Only a few (8.8%) participants sought dental treatment following dental pain. For those who used OTC drugs, analgesics accounted for 50.0%, while 21.6% either did not know or recall the type of drug they used. More females used OTC drugs; however, there was no statistically significant relationship between practices adopted for coping with dental pain and gender of the respondents. Most of those who used herbal medication belonged to the two extremes of age. Most of those who sought dental treatment were in the 31–45 years age group. There was a statistically significant association between age and practices adopted for coping with dental pain among the respondents. There was a statistically significant association between the community the participants reside and practices adopted for coping with dental pain, with most of those who used herbal medication residing in the rural area. Likewise, there was a statistically significant relationship between the level of education and practices adopted for coping with dental pain. The higher the level of formal education received, the less the use of herbal medication is. **Conclusion:** The most common practice adopted for coping with dental pain was self-medication. Also, the

level of education and type of community were associated with the use of herbal medication to cope with dental pain, with most of those who used herbal medication residing in the rural area, and the higher the level of formal education received, the less the use of herbal medication is.

5. Correlation Between Mammographic Features and Histological Findings in Female Breast Lesion at the University of Benin Teaching Hospital, Benin City

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Background: Breast diseases constitute one of the most common contemporary diseases of females. Presently, breast cancer is the most prevalent cancer in the world over. It accounts for 18.4% of female cancers. In fact, 1:14 black women will develop breast cancer, during their life time. Mammography has become an invaluable tool for diagnosing breast lesion and detecting early breast cancer in women greater than 40 years in age. The aims and objectives of this study were to correlate the mammography BIRADS categories with the histological diagnosis in breast lesions and to determine the predictive values, sensitivity, specificity, and accuracy of mammography in the diagnosis of breast lesions. **Methods:** It was a one-year (March 2015–February 2016) prospective study of consecutive female patients above 40 years old who presented with breast lesions at the UBTH. All patients had mammography and core biopsy of the breast lesion using size 16 gauge biopsy gun. All biopsy specimens were subject to histological examination. The author and a consultant radiologist reported the mammograms using the BIRADS lexicon. Mammograms were categorized into BIRADS category 1 to 6. **Results:** One hundred and one patients were studied. One hundred and six biopsies were performed. Data including age distribution, clinical features of breast lesions, mammographic features, and histology of tumors were analyzed, and correlations between these findings were highlighted. The mean ages of patients with benign breast disease are 47.0 ± 4.9 years, while those with malignant breast disease was 49.9 ± 8.5. P-value was 0.080; this difference was not statistically significant. Fibrocystic disease 6 (5.6%) was the most common benign disease, whereas invasive ductal carcinoma was the most common malignant breast disease 84 (79.2%). BIRADS V correlates mostly with malignant breast disease (97.0%). P-value was <0.001 and was statistically significant. **Conclusion:** This study showed that mammography is very useful in the diagnosis of breast lesion in women above 40 years old. Patients with BIRADS categories 3, 4, and 5 had stepwise increasing correlation with malignant breast disease.

6. Audiometric Patterns in Patients on Treatment for Drug-Susceptible Versus Drug-Resistant Pulmonary Tuberculosis in a Tertiary Center in Owerri

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Background: Pulmonary tuberculosis (PTB) is a chronic infectious disease caused by mycobacterium tuberculosis, which was identified by the German microbiologist, Robert Koch in 1882. Tuberculosis is the first infectious disease to be declared by the World Health Organization (WHO) as a global health emergency. Recent statistics showed Nigeria has a relatively high tuberculosis burden with 586,000 sufferers in 2015; 100,000 of which were HIV positive and 29,000 of them being drug-resistant cases. Tuberculosis is said to be drug-resistant when resistance develops to one or more anti-tuberculosis drugs. Multi-drug-resistant tuberculosis (MDR-TB) is a form of the disease in which the mycobacterium strain is resistant to at least rifampicin and isoniazid. Worldwide in 2015, there were an estimated 480,000 new cases of multi-drug-resistant tuberculosis and an additional 100,000 cases with rifampicin-resistant tuberculosis (RR-TB). Tuberculosis was one of the top ten causes of death worldwide in 2015 accounting for an estimated 1.4 million deaths. The treatment of tuberculosis is medically challenging, requiring a relatively long period of time with use of multiple drugs. The treatment for drug-resistant tuberculosis requires the use of second-line anti-tuberculosis drugs among which are aminoglycosides like kanamycin, amikacin, and capreomycin that have been reported to cause ototoxic hearing loss which is a challenge to the otorhinolaryngologists. A study showed significant hearing disability with aminoglycosides. The aim of this study therefore is to ascertain if there are differences between the pure tone audiometric patterns of patients on treatment for drug-susceptible and drug-resistant tuberculosis in our setting. **Methods:** We carried out a prospective comparative analytical study of all eligible newly diagnosed PTB patients admitted into the pulmonology unit of Federal Medical Centre, Owerri. All had pre-treatment baseline pure tone audiometry and a monthly audiometry for 3 months, with results collated and analyzed along with clinical information of recruits through interviewer-administered questionnaire. Data analysis was by Statistical Package for Social Sciences (SPSS) version 20.0 software for Windows, with chi-square tests for association between variables and Student's T and ANOVA tests used to compare means of variables. Statistical significance was set at p <0.05. Data were represented in tables. **Results:** The male:female ratio was 1.53:1 and 1.24:1 for the drug-resistant and -susceptible groups, respectively. Mean duration of presenting symptoms was 11.7 ± 7.8 and 7.4 ± 5.1 weeks for the drug-resistant and drug-susceptible groups, respectively. The prevalence of baseline hearing impairment was 73.7%, 73.7%, and 68.4% among the drug-resistant, drug-susceptible, and control groups, respectively, and 89.5%, 78.9%, and 68.4% by the third month with a cumulative incidence of hearing loss of 15.8%, 5.3%, and 0%, respectively. There was statistically significant difference in the mean hearing thresholds of the drug-resistant group with significant threshold shift. Kanamycin was found to be more ototoxic than capreomycin. Significant risk factors for development of hearing impairment among the participants were age >50 years, BMI <18.5 kgm2, kanamycin administration, and family history of hearing impairment. This study shows a male preponderance with involvement of people in the productive age group of 30–50 yrs which portends the effect of the disability on manpower. Hearing loss incidence was 89.5%, 78.9%, and 68.4% for DR, DS, and control, respectively. This means that the cumulative incidence of hearing impairment was 15.8%, 5.3%, and 0% in the respective groups over 3 months. The cumulative incidence ratio between the DR and the DS groups was 2.98. This means that the drug-resistant patients had approximately 3

times more hearing impairment over the 3 months than the drug-susceptible patients. This is similar to previous studies. There was a notable threshold shift in about 44.7% after 3 months of treatment in the drug-resistant group similar to other study. **Conclusion:** Patients on treatment for drug-resistant tuberculosis should be holistically assessed and choice of injectable made considering risk factors, and audiological assessment commenced at onset of treatment and regular intervals to detect hearing loss and modify dosage when necessary.

7. Prescription Pattern of Antifungal Medicines in a Tertiary Hospital General Practice Clinic

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Background: Antimicrobials play a significant role in the health care of low resource settings in Africa where infections constitute a significant proportion in the morbidity mix. Antimicrobials can either be classified based on the type of offending agents against which they are active (antibacterial, antiviral, antiprotozoal, antifungal, and antihelmintic) or their effect on the offending agents (bacteriocidal or bacteriostatic). Although the leading causes of the burden of infectious disease in Africa are HIV/AIDS, respiratory infections, diarrhea diseases, and malaria, the burden of invasive fungal infections in Nigeria has been estimated to be as high as 11.8% with associated complications and increased morbidity from the disease. Furthermore, in a clinical microbiology clinic in Southern Nigeria, Tinea corporis/capitis 28 (41.8%) as well as onchodermatitis 15 (22.4%) were the most common infectious dermatoses over a 2-year period. There is however a dearth of diagnostic facilities in detecting fungal infections in this resource limited setting. Furthermore, progress in the development of new antifungals has lagged behind in comparison with the development of other antimicrobials. This may not be unrelated to the structural similarity between the cell wall of the fungal pathogens and their host cells. Irrational and indiscriminate use of antimicrobials is today the biggest driver of drug resistance especially in Africa. This includes overprescribing, multiple prescribing, incorrect prescribing, under-prescribing, as well as inappropriate prescribing. Evaluating antimicrobial utilization is an important strategy in evaluating rational use of medicines and containing resistance. We aimed to assess the utilization of antifungal medicines at general practice clinic in a teaching hospital in South-South Nigeria. **Methods:** This retrospective cross-sectional study was conducted at the general practice clinic of the University of Benin Teaching Hospital, Benin City. The case records and prescriptions of patients who visited the hospital in the year 2021 were identified and then selected via systematic random sampling. Six hundred encounters were selected in line with the World Health Organization (WHO) guideline on drug utilization studies in health facilities.[5] The selected prescriptions were then reviewed to determine the proportion of patients with antifungal medication prescribed as well the drug use indicators. The medicines were classified using the WHO-Anatomic Therapeutic Chemical (ATC) Classification level 4. Data were presented descriptively. **Results:** A total of 600 prescriptions were reviewed; overall, the male:female ratio was 1:1.8, and the mean age (SD) was 41.68 (22.8) years with age range between 2 months to 90 years. The mean number of medicines per prescription was 3.23 (1.5) drugs. Patients who had injections prescribed were 50 (8.3%), while 209 (34.8%) prescriptions had at least an antibiotic. There were only 16 (2.7%) prescriptions with antifungal medications, and a majority 10 (62.5%) were for female patients with a mean age of 29.4 (21.9) years. Eleven (62.5%) of the antifungal agents were prescribed as monotherapy, while six (37.5%) contained at least two antifungal agents. The prescribed antifungal medicines were mostly topical and include clotrimazole 6 (37.5%), terbinafine 3 (18.8%), clotrimazole pessaries 2 (12.5%), ketoconazole 1 (6.25%), miconazole 1 (6.25%), and tioconazole 1 (6.25%). Only fluconazole 8 (50%) and itraconazole 1 (6.25%) were prescribed as oral formulations. **Conclusion:** Antifungal agents appear to be sparsely prescribed at the general practice clinic of this facility. This may suggest an under-recognition of fungal diseases or could be due to an increased referral to the dermatology clinic for expert evaluation and management. It may also serve as a pointer to need for increased capacity building for physicians.

8. Ad Hoc Constitution of Topical Antibiotics Solution for Ear Dressing as a Necessity

Abdomen Proc

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Background: Chronic otitis media (COM) refers to an inflammation of the middle ear cleft, of more than 3 months duration, though some authorities stick with more than 2 weeks duration. In few cases although an organism is cultured from m/c/s studies, the sensitive antibiotic is not available as an ear drop, limiting the effectiveness of ear dressing; the treatment hallmark. This study aims to demonstrate that ad hoc constitution of antibiotics solution for ear dressing can be used to eradicate ear infections in patients with otitis externa and COM. **Methods:** The sensitive A/B powder (meant for intravenous use) that was sensitive in the m/c/s studies was constituted into solutions using equivalent proportions of the antibiotic powder and sterile water for intravenous administartion. This is then used to impregnate sterile gauze for ear dressing. Fresh quantity of the powder and sterile water were prepared daily just before the ear dressing and by pure aseptic technique using a crocodile aural forceps held by a sterile gloved hand, and the ear canal was packed with the antibiotic-impregnated gauze. The following day a new solution was constituted, added to a sterile gauze, and placed into the ear canal, after removing the gauze that was placed the previous day. Standing instructions on avoiding contamination of the gauze were given to the patients or the care-givers. The daily dressing was continued until the discharge stopped and the ear looked dry and free from infection. Side effects of this procedure such as tinnitus, chemical burn to the external auditory canal, ear itching, worsening hearing loss, otalgia, or signs of allergic sensitivity were diligently looked out for. **Results:** Fifteen patients with COM/otitis externa with ear swab result from ear discharge revealing organisms not sensitive to antibiotics in ear drop form were demonstrated. The sensitive antibiotics powders were constituted into solutions and used for ear dressing in all the patients. After variable periods of ear dressing, the ear infections were taken care of and dry ears were achieved. Side effects already mentioned above were looked out for diligently, but none were observed to be present. **Conclusion:** Ad hoc preparation of antibiotics ear drop solution can be used to eradicate ear infections.

Abstracts Presented at the Enugu MDCAN NEC Meeting January 2023

1. Attributes of Pathological Fractures in a Nigerian Myeloma Cohort

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Background: Multiple myeloma (MM) is a plasma cell tumor usually characterized by lytic bone lesions. Pathological fracture (PF) is a debilitating condition that usually affects patient's psychomotor functions, treatment modality, morbidity, and outcome. **Objectives:** To determine the associations, characteristics, and impact of pathological fractures on survival in a group of Nigerian MM patients. **Methods:** A ten-year review of MM data from Nigerian tertiary hospital hemato-oncology unit to evaluate attributes of PF in myeloma cohort. Data retrieved from 66 patients receiving care. Statistical analysis used SPSS version 25.0. Significance was $p < 0.05$. **Results:** Of the 66 patients, 23 (34.8%) had PF 12 (52.2%) males (M) and 11 (47.8%) females (F), M: F 1.1:1, while 43 (65.2%) had no fractures. Age ranges 44–70 years, mean 58.7 ± 8.2 years. Eighteen (78.3%) had lytic bone lesions. Twenty (95.2%) had bone pains. ESR >150 mm1stHr in 11 (47.8%). Nineteen (82.6%) had Bence Jones proteinuria. Twenty-one (91.3%) had monoclonal protein. Immunoglobulin G 12 (52.2%) was predominant followed by IgA 5 (21.7%). There were significant correlations between hemoglobin [$r = 0.446$, $p = 0.002$]; platelet [$r = -0.347$, $p = 0.041$], serum calcium [$r = 0.471$, $p = 0.006$], and bone pains; urea [$r = -0.787$, $p = 001$], creatinine [$r = -0.853$, $p = 0.001$], and renal impairment, respectively. Associated co-morbidities are diabetes, peptic ulcer disease, and nephropathy. Bortezomib-based regimen was choice treatment. Overall survival is 16 (69.6%) with 7 (30.4%) mortality. **Conclusion:** Myeloma PF impacts greatly on patient's psychosocial and economic well-being with associated bone pains, anemia, hypercalcemia, renal impairment, raised IgG levels, and high risk of morbidity on a background of chronic medical conditions.

Keywords: Cohort, Monoclonal protein, Myeloma, Pathological fracture, Plasma cell

2. Prevalence and Patterns of Neurodevelopmental Problems among Children with Congenital Heart Diseases at the UNTH Enugu

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Background: Continued progress in early diagnosis and therapeutic options has contributed to increased survival of infants with congenital heart diseases (CHD), but throws up another challenge of long-term morbidities and functional disorders of adaptation. **Methods:** This was a cross-sectional sstudy involving chilsdre with Congenital Heart Disease (CHD) and their corresponding age & gender matched controls. Semi-structured pretested questionnaires were used in documenting socio-demographic data. General, CVS, and CNS examinations were performed. Neurodevelopmental assessment using MDAT was done. Data were analyzed using IBM SPSS version 20.0, with level of statistical significance as $p < 0.05$. **Results:** Forty subjects and 40 controls aged 6–60 months, male to female ratio of 3:2 were studied. Thirty-seven (92.5%) subjects had one or more symptoms of congenital heart disease. Neurodevelopmental delay was noted in 23 (57.50%) children with CHD compared to six (15.0%) controls. ($\chi = 15.63$, $p < 0.0008$). While 17 (42.5%) patients with CHD had global delay, none of the controls had it. The difference in the number of domains with neurodevelopmental delay for patients and their controls was statistically significant ($p < 0.001$). Though there is no significant correlation between age ($\chi^2 = 7.243$; $p = 0.203$) and gender ($\chi^2 = 0.017$; $p = 0.896$) of children with NND, the younger age group were more affected. NND was also commoner in children with Teratology of Fallot (TOF) 5 (62.5%). **Conclusion:** Neurodevelopmental delay was common in children with CHD and a significant number had global delay.

Keywords: Congenital heart diseases, Children, Enugu, Neurodevelopmental problems

3. Cervical Cytology and Herpes Simplex Virus Type-2 Serology among Human Immune Deficiency Virus Infected Women on Highly Active Antiretroviral Therapy in Enugu, Nigeria

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Background: Prevalence of Human Immunodeficiency Virus (HIV) and Herpes Simplex Virus Type-2 (HSV-2) infections are high, and program on cervical cancer screening is weak in Nigeria. **Objectives:** To determine the prevalence of Herpes Simplex Virus Type-2 co-infection and cervical cytology among HSV-2 co-infected Human Immunodeficiency Virus sero-positive (HIV+) women on Highly Active Antiretroviral Therapy (HAART). **Methods:** A cross-sectional, hospital-based study. Active participants included 105 HIV sero-positive women on HAART and 104 HIV sero-negative (HIV-) women who passed inclusion criteria and signed written informed consent. Each participant was coded with specific number. Structured questionnaire was used to obtain the socio-demographic and medical history. Serum was obtained for HSV-2 serology test for all participants and HIV screening for HIV negative participants. Cervical smears were collected for Papanicolaou stains and immunocytochemistry using

anti-P16[INKa] antibody. **Results:** Prevalence of HSV-2^{+} was 50.5% among HIV[+] women on HAART and 16.3% among HIV[-] women, odds ratios [95% CI]; p-value was 5.21 [2.74–9.94]; p <0.0001. HIV[+] women on HAART co-infected with HSV-2 significantly had more cervical lesions, 11.4% compared to HIV[-] women uninfected with HSV-2, 4.8%, OR [95% CI]; p-value 4.8 (1.58–14.54); p = 0.006. **Conclusion:** Prevalence of HSV-2 was significantly high among HIV[+] women on HAART. HSV-2^{+} co-infection could be an enhancer of cervical lesions among HIV[+] women on HAART. Hence, anti-herpetic agent introduction and screening for HSV-2 among HIV[+] patients are recommended.

Keywords: Cervical cytology, Herpes Simplex Virus Type-2, Highly Active Antiretroviral Therapy, Human Immunodeficiency Virus

4. TRAUMATIC TONGUE LACERATION: AN EXPERIENCE OF TWO TERTIARY CENTERS IN SOUTH EAST NIGERIA

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Background: Traumatic injuries to the orofacial region are common and can be challenging to the oral and maxillofacial surgeon. The aim of this study is to determine the pattern and treatment of this condition in two tertiary centers in Enugu and Ebonyi State. **Methods:** This is a three-year prospective study of traumatic tongue injuries managed at the oral and maxillofacial center of two tertiary hospitals in southeast of Nigeria. **Result:** A total of 37 cases had tongue laceration among the 353 participants with oral and maxilofacial trauma, giving a pervalence of 10.5%. Their age ranged from 6 months to 57 years with a mean of 18.4 years (SD 17.5). Twenty-three (62.2%) are males and 14 (37.8%) are females in a ratio of 1.6:1. The duration of injury on presentation ranged from 45 mins to 96 h with a mean duration of 26.7 h. Majority of the laceration occurred in the anterior part of the tongue 24 (64.9%). Falls 13 (35.1%) and motor vehicle accidents 9 (24.3%) were the most common etiology. Thirty-six (97.3%) were sutured primarily on presentation, while only one (2.7%) was delayed before closure. Anesthesia was achieved with only local anesthetic agent (LA) in 18 (48.6%) cases, in 13 (35.1%) cases a combination of LA and sedation. **Conclusion:** Tongue injuries are not very common in southeast of Nigeria; management in children may require sedation. Treatment could involve suturing of the wound or be left alone to heal.

Keywords: Anesthesia, Laceration, Suturing, Tongue

5. EMPIRICAL SURVEY OF TUMOR MARKERS IN NIGERIAN TERTIARY HOSPITALS—IMPLICATIONS FOR PATIENT MANAGEMENT

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Background: Tumor markers are valuable in the clinical management of the cancer patient. Though not the primary tools of cancer diagnosis, they play important roles in diagnosis, treatment monitoring, detection of recurrence, and prognostication. With an increasing cancer burden in Nigeria, it is imperative that hospitals are adequately equipped for the investigation and management of the cancer patient including tumor marker testing. The study objective was to determine the extent of tumor marker testing availability and diversity in Nigerian tertiary hospitals. **Methods**: The study employed a cross-sectional hospital-based multicenter research design, conducted in University Teaching Hospitals and Federal Medical Centers (FMC) in Nigeria. Data collection tool was a semi-quantitative self-administered questionnaire, and analysis was performed using Stata version 13. Statistical significance was set at P <0.05. **Results:** Thirty-four tertiary healthcare institutions participated in the study. TPSA was the most common marker assayed (79.41%), followed by Alpha fetoprotein (55.9%), and quantitative B-HCG (44.1%), while Beta-2-microglobulin and thyroglobulin were the least (2.9%) assayed. There were noted differences in availability of tumor markers between University Teaching Hospitals and FMCs. **Conclusion:** The availability and diversity of tumor markers in Nigerian tertiary care institutions were found to be suboptimal even as cancer burden in Nigeria continues to rise. There is need for a concerted effort on the part of all stakeholders in cancer care to change this narrative and provide services targeted at a more robust and holistic care for the cancer patient.

Keywords: Cancer, Nigeria, Tertiary hospital, Tumor marker.

6. EFFECT OF LOCKDOWN AND IMPACT ON PEOPLE LIVING IN ENUGU STATE, NIGERIA

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Background: Since the coronavirus disease (COVID-19) pandemic, countries have continued to employ diverse strategies in the control of the virus to control the impact of the pandemic. Objective is to determine the effect of lockdown and ascertain the impact on people living in Enugu State. **Methods:** A cross-sectional study among people living in Enugu State who owned smart phones. Google forms were dispatched to adults from 18 to 65 years via social media/Internet. **Result:** 32% of respondents actually observed the lockdown. 41% of people got sick during lockdown, 29% had relatives and loved ones who died due to COVID-19, and 64% of the people they know died this period due to both COVID-19 and other causes. 31% of people self-medicated. 35% of respondents had financial loss. 22.2% said there was not enough food available during the lockdown. However, 37% of people gained weight due to inactivity and eating too much, out of boredom, even though 6% claimed they lost weight due to lack of food during the lockdown. 22% of respondents said they were spending more; 88% of participants believed Internet usage increased. **Conclusion:** COVID-19

pandemic had limited social freedom for all. It also caused serious implications like decline to access to health care, causing a rise in non-communicable diseases, mental health, economic effects increase in financial expenditure and global economic crises, recession, issues of unemployment and "laying-off," political, social, and cultural effects, educational interruption, increase in crime rate, and increase in domestic violence, religious, and environmental impact.

Keywords: COVID-19, Enugu, Impact, Lockdown

7. Management of Toxic Epidermal Necrolysis in a Resource-Poor Setting: A Case Report

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Background: Toxic epidermal necrolysis (TEN) is a rare but potentially life-threatening dermatological condition. It is characterized by diffuse exfoliation of >30% of the skin and mucous membranes due to immune-mediated destruction of the epidermis. **Case Presentation:** We report a case of TEN in a 2-year-old female who presented with history of fever and a rash on the trunk, for which mother gave an oral herbal concoction, calamine lotion, and amoxicillin + clavulanic acid. 24 h later, the rash progressed to involve whole body. On presentation, she had extensive exfoliation of >90% of the body surface area, with multiple bullae, intraoral ulcers, and excoriation of the eyelids. She was admitted in the Pediatric Intensive Care Unit where she received intravenous hydration and antibiotics, micronutrients, albumin infusion, morphine, nasogastric feeds, and eye care. The skin was cleaned daily with normal saline and dressed with petroleum jelly impregnated gauze prepared in the Central Sterilizing Services Department of UNTH. Skin ulcers resolved, she was discharged after three weeks, and she is awaiting amniotic membrane graft by ophthalmologists for management of corneal ulcers. **Conclusion:** In resource-poor settings like ours, where payment for health care is mostly out of pocket and pre-packaged protective dressings may be too expensive or unavailable, sterile locally available materials can be used for dressing to improve outcomes.

Keywords: Corneal ulcers, Resource-poor settings, Toxic epidermal necrolysis

8. Willingness of Voluntary Counseling and Testing among Long-Distance Truck Drivers; a Window of Opportunity in Control of Retroviral Disease

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Background: To evaluate the factors influencing practice of voluntary counseling and testing among long-distance truck drivers as it affects the spread of retroviral disease. **Methods:** This was a quantitative cross-sectional study conducted in the major bus terminals in Enugu State, Nigeria. A questionnaire-based tool was used to collect data from population of adults' bus drivers in the three main motor parks in Enugu metropolis from January 2019 to March 2020. The participants were 500 long-distance truck drivers. Knowledge and practices of the participants were assessed using a semi-structured interview guide. They were interviewed on various aspects of HIV/AIDS. Outcomes measured were knowledge and practice of voluntary counseling and testing. On knowledge and practice performance scale rating, <50% is poor, 50–75% is fair, and >75% as good. **Results:** Among the five hundred (500) long-distance truck drivers (LDTD) studied, 68.0% showed a fair knowledge of HIV/AIDS. The prevalent high-risk behavior was multiple sexual partners (73.2%). The practice of voluntary counseling and testing was poor, as (17.0%) had practiced it; however, their risk perception was high at 76.0%. Fortunately, there was also high willingness to screen 302 (60.4%). This was significantly higher in those with tertiary level of education (100%) and the married participants (75.8%) (χ^2 = 174.4, p <0.01). **Conclusion:** There was a high-risk perception in this study population with a high willingness to be tested.

Keywords: HIV testing, Truck drivers, Willingness

9. Maternal-Fetal Outcome of Lassa Fever in Multiple Gestation: Report of Two Cases from Southern Nigeria

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Background: Lassa fever (LF) is an emerging viral hemorrhagic fever prevalent in West Africa, and knowledge of its presentation, management, and outcome in pregnancy is evolving. **Case Presentation:** This was a case report of two women with twin gestation. The first woman was a participant in the ongoing CEPI epidemiological study and was diagnosed on presentation to a designated healthcare facility for evaluation of fever. The second woman was referred to us from a Primary Healthcare Center with complaints of fever. Both women were managed at our dedicated isolation facility. Both mothers and three of the four fetuses survived. Of note is that, in spite of the suggested increase in viral load in placenta and fetuses from pregnancies with multiple placenta and fetuses, women with twin pregnancies presented in these reports did not exhibit worse symptomatology and poorer outcomes as compared to singleton gestations. **Conclusion:** Lassa fever can complicate multiple pregnancy and remain a potential for higher morbidity and mortality in both mother and baby.

Keywords: Lassa fever, Symptomatology, Twin gestation

10. Misdiagnosis of Otolaryngologic Diseases, Lessons to Learn

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Background: A misdiagnosis is any time a patient is diagnosed with an illness, injury, or any other condition that the patient does not actually have. A misdiagnosed illness can lead to a delay in

treatment for the actual illness a patient has, but it can also lead to treatments that are unnecessary and possibly harmful. **Case Presentation:** The index cases were cases of cancer of the larynx and bronchial foreign body impaction which were, respectively, misdiagnosed and managed initially as acute severe asthma and interstitial lung disease before definitive diagnoses and treatment by the otolaryngologist. The cancer of the larynx was presented with unremitting hoarseness and progressively worsening dyspnea, while bronchial foreign body was presented with sudden onset of difficulty in breathing just immediately after eating. **Conclusion:** In cases of unremitting hoarseness with or without dyspnea, do X-ray soft tissue neck (AP and lateral) to rule out laryngeal pathology. A case of sudden onset of dyspnea while eating should be assumed to be airway foreign body impaction until proven otherwise.

Keywords: Learnt, Lessons, Misdiagnosis, Otolaryngologic diseases

11. Serum Leptin Levels and Association with Maternal Weight Gain at Term among Obese and Non-Obese Pregnant Women in Enugu, Nigeria: A Comparative Cross-Sectional Study

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Background: This study aimed to determine and compare the mean maternal serum leptin levels, the prevalence of high serum leptin levels, and average gestational weight gain at term among the obese and non-obese pregnant women in Enugu. **Methods:** A cross-sectional comparative study of 170 obese and non-obese pregnant women in health facilities in the Enugu metropolis was carried out. The serum levels of leptin were determined using the ELISA technique. The gestational weight gain of the participants was also determined at term. Data were analyzed with SPSS software. **Results:** The mean serum leptin level of the obese pregnant women at term (99.394 ± 50.20SD ng/ml) was significantly higher than that of the non-obese pregnant group (48.979 ± 30.35SD ng/ml). Also, the prevalence of hyperleptinemia among obese pregnant women (95.3%) was significantly higher than that of the non-obese pregnant women (76.5%) at term. The mean percentage weight gain of the non-obese pregnant women (24.13%) was rather significantly higher than that of obese pregnant women (20.07%) at term. There was a weak correlation between mean serum leptin and maternal weight gain in the non-obese and obese pregnant women at term. The predictors of high maternal serum leptin at term among the participants were the parity and social class of the participants. **Conclusion:** The mean maternal serum leptin, maternal weight gain, and hyperleptinemia at term were significantly higher in the obese compared to the non-obese pregnant women in Enugu. And there was a poor correlation between maternal serum leptin and mean gestational weight gain at term

Keywords: Enugu, Maternal weight gain, Pregnant women, Serum leptin