IMPORTANCE OF BRONCHOSCOPY IN INVESTIGATING PATIENTS WITH CHRONIC COUGH: CASE REPORTS.

Ogunsina MA[1], Makarfi ML[1]

1. Department of Medicine, Barau Dikko Teaching Hospital, Kaduna

Introduction: Fiberoptic bronchoscopy is an invasive procedure for visualization of the respiratory tract for the diagnosis and management of a spectrum of diseases of the airway and lungs.

Case report: A 67 year old male with 14 months history of recurrent cough, three months weight loss and one month progressive exertional dyspnea. Cough was initially dry, not distressing though characterized as embarrassing. Cough became productive of whitish sometimes brownish sputum, occasions of bloody steaks, non parosysmal, no chest pain, fever, drenching night sweats and weight loss. No contact with a chronically coughing patient.

Had prostatectomy four years ago (histology benign prostatic hypertrophy). Never smoked, hypertensive on anti-hypertensives. Findings: An elderly man in respiratory distress (SpO2 85) had bilateral crackles worse on the left.

Investigations: cxray showed left mid and lower zones reticulonodular lesions, chest computer tomography scan showed widespread reticulations with background ground glass opacification of the entire left lung. Had treatment for interstitial lung disease and anti TB with no improvement.

Bronchial aspirate cytology: Very cellular smear with pleomorphic epithelial cells with round to oval nuclei, prominent nucleoli and intracytoplamic vacuoles - Adenocarcinoma.

2. A 63year old man with two months history of cough productive initially of rusty brown sputum and later unproductive, no chest pain, occasional di culty with breathing. No significant past medical and social history. Had treatment for Lobar pneumonia with minimal improvement. Investigations including cxray were unremarkable. Bronchial aspirate cytology showed adenocarcinoma.

Conclusion: The invention of the bronchoscope revolutionized pulmonary medicine. It should be carried out in patients with chronic cough.

SPIROMETRY FINDINGS IN CALABAR, NIGERIA

Etiuma, AU[1], Antia, SE[2], Nwagboso CI[1].

1. Cardiothoracic and vascular division, University of Calabar/UCTH, Calabar.
2. Testimony Medical Consultants, Calabar auetiuma@aol.com, 08033573255.

Background: Lung function assessment is an invaluable objective tool for management of respiratory diseases. Prevalence of reduced lung function varies with reference values, incidence of asthma, use of tobacco and occupational setting.

Objective: To determine diagnostic indications for spirometry and corresponding findings in Calabar, Nigeria.

Methods: Between January 2015 and October 2019 inclusive, we did a retrospective review of all cases referred for spirometry at a private facility in Calabar (Testimony Medical Consultants). Automated BTL-08 Spiro Pro Spirometer was used.

Results: A total of 336 Spirometries were done. 170 males, 166 females. Age range 11-90years. Indications for spirometry in the study were: Routine medical check 231(68.8%), Obesity 17(5.1%), Non-specific/non-ischaemic chest pain 16(4.8%), COPD 13(3.9%), pre-operative assessment 4(1.2%), others 53(15.7%). Of 3.9% referred for COPD, 30.6% had obstructive abnormalities while 69.4% had restrictive abnormalities. All obese patients had restrictive abnormalities. Of 231 patients who had routine checkups, 34.6% had normal spirometry, 56.7% had restrictive abnormality while 8.6% had obstructive abnormality. Only 26.6% of males and 42.4% of females had normal spirometry. With age adjustment, prevalence of restrictive abnormalities increased proportionately with increasing age after 40 years in males and 50 years in females.

Conclusion: The data suggest that spirometry should be incorporated into routine medical checkup for the population above 40years. Early detection of abnormal lung function could help prevent debilitating pulmonary health.

Keywords: Spirometry, Indications, Pulmonary Health

THE IMPACT OF TYPE 2 DIABETES MELLITUS ON VENTILATORY AMONG SOUTH EASTERN NIGERIANS.

Odilinye HC[1], Ukwaja KN[1], Nwosu NI[2], Onyedum CC[2], Chukwuka CJ[2]

1. Alex Ekwueme Federal University Teaching Hospital Abakaliki.
2. University of Nigeria Teaching Hospital Ituku-Ozalla Enugu.

Background: The pulmonary a ectation by diabetes mellitus (DM) has not received adequate attention, and as such, there is paucity of data on the impact of diabetes mellitus on ventilatory function especially in South- Eastern, Nigeria. This study, therefore, aimed to determine the impact of type 2 DM on ventilatory function as observed at a tertiary health care facility in South-Eastern Nigeria.

Methods: This was a comparative cross sectional study of 100 consenting type 2 DM patients aged between 30 and 65 years, and 100 consenting, normal, adequately matched subjects. Anthropometric parameters were obtained from both study groups, and spirometry was done using spirolab III, version 1.7. Predicted ventilatory parameters were calculated using Nigerian equations. SPSS version 21 was used for data analysis.

Results: A total of 100 type 2 DM patients and 100 normal control subjects were studied. There were 49 males (49%) and 51 females (51%) with type 2 DM. Comparatively, 51 (51%) of the control group were males while 49(49%) were females. The mean FVC, FEV1, FEF25-75 , and PEFR, were significantly lower in the type 2 DM group than in the control group (P values of 0.010, 0.015, <0.001, 0.006 respectively). Likewise percentage predicted FVC, FEV1 and PEFR were significantly lower in the type 2 DM patients (P values <0.05). As much as 22% of the type 2 DM subjects had restrictive pattern while 2% had obstructive pattern. Long duration of DM (10 years or more) was associated with increased likelihood of developing restrictive ventilatory pattern, (P<0.001, odds ratio 14.224).

Conclusion: Type 2 diabetes mellitus is associated with restrictive ventilatory dysfunction. Duration of DM of 10 years or more is an independent predictor of restrictive ventilatory pattern among type 2 DM subjects, while there is no association between glycosylated haemoglobin level and ventilatory function.

USE OF THORACIC ULTRASOUND AMONG RESPIRATORY PHYSICIANS IN NIGERIA: RESULTS FROM A PRELIMINARY SURVEY

***Adeniyi B[1], Nwosu N[2], Sola K[1], Tinuke A[3], Erhabor G.[4]**

1. Department of Medicine, Federal Medical Centre, Owo
2. Department of Medicine, University of Nigeria Teaching Hospital
3. Department of Radiology, University college Hospital, Ibadan
4. Department of Medicine, Obafemi Awolowo University teaching Hospital, Île-Ife

*** Corresponding author email**: delbis2003@yahoo.com

Introduction: Pleural diseases are common causes of respiratory morbidity and mortality. Globally, the use of thoracic Ultrasound is gaining prominent role in the evaluation of pleural diseases either for diagnostic or therapeutic purposes. It is increasingly becoming part of many thoracic guidelines to perform thoracic ultrasound before carrying out any pleural procedure. There is paucity of data on training, accessibility and use of thoracic ultrasound in diagnosing and locating pleural diseases and its complications in developing countries.

Aim: To assess the use and availability of thoracic ultrasound among respiratory physicians in Nigeria

Methodology: We conducted a survey to assess the knowledge, availability and use of thoracic among respiratory physicians in Nigeria using survey monkey.

Result : Of the 57 respondents, only 12.3% had access to thoracic ultrasound on the ward while no respondents had a regular dedicated training session for thoracic ultrasound. Only 4 (7%) of the respondents had gotten level 1 competency, indicating ability to independently perform chest ultrasound of which half were senior registrar with more than 3 years of post-junior residency and other half are consultants.

Conclusion: The use of thoracic ultrasound by respiratory physicians appears to be low. Training, re-training and mentoring are needed to assist both trainees and trainers to attain the required competency in chest ultrasound in order to ensure safer pleural practices.

The authors declare no conflict of interest

Keyword: Thoracic ultrasound, Pleural diseases, training

INDICATIONS FOR SPIROMETRY IN A NIGERIAN TERTIARY HOSPITAL: ARE THERE CHANGING TRENDS?

Ugoeze F.C[1*], Eruaga B[2], Ezunu E.O.[3], Aniekwensi E.C.[4], Ele P.U.[5]

* **Correspondence**: Department of Internal Medicine, Federal Medical Centre Asaba, Delta State.

1. Department of internal medicine, federal medical centre, Asaba
2. Department of internal medicine, federal medical centre, Asaba
3. Department of internal medicine, federal medical centre, Asaba
4. Department of internal medicine, federal medical centre, Asaba
5. Department of internal medicine, nnamdi Azikiwe teaching hospital, Nnewi

Background:- Spirometry is a non-invasive and cost e ective physiologic test that complements other investigative procedures in the evaluation of respiratory diseases.

Aim: To study the pattern of lung function in patients referred to the respiratory laboratory of Federal Medical Centre, Asaba and to determine if there are changing trends in comparison with the earlier studies.

Method: We reviewed and analysed the records of patients referred to our respiratory laboratory from August 2015 to January 2019 (a period of three and half years).

Results:

- A total of 414 patients had spirometric evaluation under the period of study with a mean age of 56.6
- Bronchial asthma was the commonest indication (32.05%), closely followed by routine medical fitness (31.31%).
- Civil Service represented the commonest occupation (24.64%), closely followed by National Youth Service (22.46%), and then students (18.12%).
- The commonest pattern was normal spirometry (62.80%) followed by obstructive pattern (24.40%). However, referral for preoperative evaluation was 1.45%.

Conclusion: There is increasing use of spirometry in respiratory care and the trend suggest increasing spirometric request for medical screening prior to employment into civil service, National youth service and admission into schools.

The Profile of suspected COPD patients sent for spirometry at UNTH respiratory laboratory

Nlewedim IP[1*], Nwosu NI[1], Chukwuka CJ[2], Onyedum CC[2]

Department of Internal Medicine UNTH, Enugu

College of Medicine, University of Nigeria Enugu Campus

* Correspondence: augustinepaul159@gmail.com

Background: Chronic obstructive pulmonary disease (COPD) is an increasing cause of morbidity and mortality, accounting for 6% of global deaths, the majority of which are from low- and middle-income countries. Spirometry is an important investigation in the diagnosis and monitoring of patients with COPD.

Objective: The objective of this study was to assess the profile of COPD patients diagnosed in the respiratory laboratory of a tertiary institution.

Methods: This was a retrospective study of all patients who had spirometry done between September 2017 and September 2019. Those who had spirometric confirmation (persistent/ chronic airflow limitation; defined as a fixed ratio of FEV1/FVC < 0.7) of COPD were further grouped based on severity. The Data regarding their socio demographic and spirometric indices were analysed appropriately.

Results: Within the study period, a total of 397 patients were referred to the respiratory laboratory for spirometry. The mean age was 45.19(±19.21) while the Male to Female ratio was 1:1.3. Of those referred for spirometry, 154(38.7%) were suspected to have bronchial asthma while 98(24.6%) were suspected to have COPD. In addition, out of the total patients referred for spirometry, 168(42.3%) had spirometric confirmation of COPD defined as a fixed ratio of FEV1/FVC < 0.7. Of the total number suspected to have COPD, 62(63.2%) had a spirometric confirmation of COPD. The mean ages for the COPD patients for the males and females were 60.15 and 50.1 respectively while the male to female ratio was 1.3:1. The most common spirometric finding was the GOLD stage 2 in both sexes.

Conclusions: The need for spirometric evaluation of all patients suspected to have COPD cannot be over emphasised with the rising prevalence of COPD particularly in sub- Saharan Africa. Also, the increasing trend of COPD among females over the age of 40years raises a cause for concern.

Keywords: COPD, Spirometric indices, persistent airflow limitation

EFFECT OF LUNG FUNCTION ON OUTCOME OF PLEURODESIS DONE FOR MALIGNANT PLEURAL EFFUSION

Chidiebere P. Echieh[1], Chimaobi Nwagboso[1], Ogbudu S.O.[1], Josiah M. Njem[2], Olugbenga O. Ojo[3], Aetiuma A.U.[1], Bassey O.O.[1]

1. Division of Cardio-thoracic & Vascular surgery, Department of Surgery, University of Calabar Teaching Hospital.

2. Jos University Teaching Hospital, Jos.

3. OAU Teaching Hospital, Ife.

Background: Palliative care for malignant pleural e usion includes pleural drainage and pleurodesis to prevent recurrence of e usion. Pleurodesis or pleural symphysis is a procedure aimed at causing adhesion of the visceral and parietal pleurae with attendant obliteration of the pleural space and prevention of recurrent pleural collection. It serves to prevent recurrent pleural collections and lung collapse thus maintaining lung re-expansion. Success of pleurodesis requires contact of the visceral and parietal pleurae as well as distribution of the sclerosant by respiratory movements. Poor respiratory excursion could result in percolation of the sclerosant hence failure of pleurodesis. We studied the impact of pre–procedure lung function on the outcome of pleurodesis done for the palliation of malignant pleural e usion.

Methods: Consecutive patients with malignant pleural e usion who could perform lung function studies meeting the selection criteria had their Forced expiratory lung function done before pleurodesis. Pleurodesis was done with intra – pleural instillation of 2 grams of Tetracycline. Outcome of pleurodesis was assessed by a chest X – ray done fifteen days post - pleurodesis. FVC, FEV1, FEV1/FVC and FEF 25 -75% as well as SpO2 were measured.

Results: 63 patients met the inclusion criteria, 1 withheld consent and 2 died before study completion and were excluded. Data on 60 patients were analyzed. Mean age of patients was 45.77 (±17.99) years, with a male: female ratio of 1:2. Success was defined as no re-accumulation of pleural fluid for at least 15 days as determined by chest X-ray or no further requirement for drainage within 15 days of pleurodesis or both. Treatment failure was considered as re-accumulation greater than 50% of original volume of e usion or the requirement for fluid drainage within 15 days of treatment. The success rate of pleurodesis in this study was 70%. The mean FEV1, FVC and FEF 25-75 before pleurodesis were 24.4, 24.27 and 23.8 per cent predicted respectively. FEF 25-75 values less than or equal to 29 per cent predicted were significantly related to poor outcome.

Conclusions. Pleurodesis is key in the palliative care for malignant pleural e usion. Success rate of pleurodesis is a ected by several factors. This study documents a relationship between forced expiratory lung function and outcome of pleurodesis. This significant relationship between poor spirometric parameters and poor outcome of pleurodesis could be attributed to percolation of the sclerosant in dependent areas of the pleural space with resultant loss of widespread distribution of the sclerosant by the ine ectual breathing movement. We conclude that Poor Mid Forced Expiratory Flow values were related to poor outcome following pleurodesis. We recommend optimization of spirometric capacity in patients with malignant pleural e usion who are being worked up for pleurodesis.

Key Words: Malignant pleural e usion, Palliation, Pleurodesis, Spirometry

SEASONAL VARIATION IN ASTHMA EXACERBATION IN SOKOTO-A SUDAN SAVANNA REGION OF NIGERIA.

***Abbas A[1], Okpapi J.U.[2], Njoku C.H.[3], Abba A.A.[2], Isezuo S.A.[1], Isah M.D.[4]**

1. Department of Medicine, Usman Danfodiyo University, Sokoto, Nigeria

2. Department of Medicine, Ahmadu Bello University, Zaria, Nigeria

3. Department of medicine, University of Calabar, Cross Rivers, Nigeria

4. Department of medicine, General Hospital, Minna, Niger State, Nigeria

* **Correspondence Email**: aminuab@gmail.com

Background: Asthma accounts for 1 out of every 250 deaths worldwide. Many of these deaths are preventable as they occur as a result of suboptimal long-term medical care and delay in seeking help during severe exacerbation.

Objective: The aim of this study is to assess seasonal variation in asthma exacerbation among patients attending Usmanu Danfodiyo University Teaching Hospital, Sokoto

Materials and Methods: Eighty-seven (87) patients aged 16 years and above with physician diagnosed asthma were selected by systematic random sampling. Clinical information was obtained from each participant about history of asthma exacerbation and data of meteorological variables was obtained.

Results: Eighty-seven (87) patients comprising 60 males and 27 females aged 32.1 ± 10.8 years participated in the study. Among the study participants, 50.6%, 28.7% and 20.7% had exacerbation during harmattan, rainy and dry (hot) seasons respectively. Correlation analysis shows significant negative relationship between temperature and asthma exacerbation ($r = -0.372$, $p<0.01$).

Conclusion: This study shows that asthma exacerbation is most frequent during the harmattan season and low temperature is associated with exacerbation.

RISK OF OBSTRUCTIVE SLEEP APNOEA SYNDROME IN AN ADULT POPULATION WITH HIV INFECTION IN SOUTHWEST NIGERIA

Odeyemi AO[1]*, Ala OA[1], Ogunwobi OO[1], Odeyemi AO[2], Israel GM[1], Oni OO[1], Oyewusi DO[1]

1. Department of Medicine, College of Health Sciences, Bowen University, Ogbomoso, Oyo state, Nigeria.
2. Department of Paediatrics, College of Health Sciences, Bowen University, Ogbomoso, Oyo state, Nigeria.

* **Corresponding author email**: abiona.odeyemi@bowenuniversity.edu.ng

Introduction: Emerging data suggests that obstructive sleep apnoea syndrome (OSAS) is common among people living with HIV (PLWH). The burden of HIV infection in Nigeria is high. Unrecognised and untreated OSAS have significant impact on the quality of life and may a ect the gains of successful treatment of HIV.

Objectives: To determine the proportion of an adult population of PLWH in South-western Nigeria who have a high risk for OSAS and the associated risk factors.

Materials and methods: A cross-sectional survey of 198 adults attending the clinic dedicated to PLWH at Bowen University Teaching Hospital (BUTH), Ogbomoso was done using the STOP-BANG questionnaire. Data collected include, socio-demographic characteristics and anthropometric measurements. The blood pressure and BMI were measured and calculated respectively. Factors associated with high risk for OSAS were identified.

Results: Of the 198 participants, 73.2% were females. Forty (20.2%) had a high risk for OSAS and the factors associated this risk include male sex, age, BMI, neck circumference and hypertension. Duration on ART and CD4 count did not show a significant relationship with the risk of OSAS.

Conclusion: The risk of OSAS is high in a significant proportion of an adult population of PLWH in South-western Nigeria and this risk is related to age, male sex, BMI, neck circumference and hypertension.

Key words: OSAS, PLWH and STOP-BANG.

HIGH RISK OF OBSTRUCTIVE SLEEP APNEA AMONG HYPERTENSIVE PATIENTS: A PREVALENCE STUDY

Nwosu NI[1*], Umeh CR[2], Ukemenam WC[2], Anyim OB[3], Nlewedim P[1], Onyedum CC[4], Chukwuka CJ[4]

1. Department of Medicine, University of Nigeria Teaching Hospital (UNTH) Ituku/Ozalla, Enugu.
2. Department of Family Medicine, UNTH Ituku/Ozalla, Enugu.
3. Department of Medicine, Enugu State University Teaching Hospital, Enugu.
4. Department of Medicine, College of Medicine, University of Nigeria Enugu Campus

* **Corresponding author**: nnamnwosu@yahoo.com

Introduction: The prevalence of Obstructive sleep apnea (OSA) is rising globally. OSA is an independent risk factor for hypertension, and its presence can lead to poor response to antihypertensive medications. A previous Nigerian study among hypertensives attending a cardiology clinic found a high prevalence of OSA. Presence of OSA is usually not actively sought for during clinical evaluation of hypertensive patients resulting in a missed opportunity to treat OSA. This study highlights the need to screen for OSA among hypertensive patients.

Objective: This study assessed the prevalence of high risk of OSA and Excessive Daytime sleepiness (EDS) among hypertensive out-patients . It also assessed the pattern of symptoms of OSA among the participants.

Materials and methods: A structured interviewer administered questionnaire assessing symptoms of OSA, Epworth Sleepiness Scale, STOPBANG score, presence of co-morbidities and demography was used. Participants were enrolled from the out- patient clinics of University of Nigeria Teaching Hospital and Enugu State University Teaching Hospital.

Results: Completed questionnaires were obtained from 320 hypertensive patients. The prevalence of high risk of OSA was 13.8% and that of EDS was 5.9%. Among those with high risk of OSA(44 participants), 68.2% had fragmented night sleep, 56.8% morning headache, 50% non-refreshing sleep and 18.2% abrupt awakening accompanied by gasping or choking at night. None of these patients were further evaluated with sleep diagnostics.

Conclusion: Prevalence of high risk of OSA among hypertensive patients was moderately high in our cohort. We suggest routine screening for OSA during clinical evaluation of hypertensive patients.

Keywords: Obstructive sleep apnea, prevalence, Epworth sleepiness scale

SEVERE COPD WITH MULTIMORBIDITIES: OPTIMIZING THERAPY IS KEY. CASE REPORT OF AN EXPERIENCE IN LAGOS

Ojo O.T.[1*], Fapounda T.V[1], Awolola E.O.[1], Adeyeye O.O.[1], Bandele E.O.[1]

1. Department of Medicine, Lagos State University Teaching Hospital, Lagos

* **Correspondence email**; ojofemi911@yahoo.com

ABSTRACT

Chronic Obstructive Pulmonary airway disease is a debilitating condition characterized by airflow limitation that is not fully reversible. COPD is a major cause of morbidity and Mortality. The global prevalence of COPD is about 11.7%(1). In Africa , the prevalence is 4.1- 24.8% (2). The burden of COPD in Nigeria was reported as 5-11% (3). However the burden in Respiratory clinic in LASUTH is about 7.5%. Its management in our environment is challenged with limited access to appropriate therapies due to non-availability, exorbitant cost and Multimorbidities. We report a case of 65 year old man with cancer of the prostate, Chronic myeloid leukemia with significant tobacco use and severe COPD who was managed with disease modifying therapies. He presented to the clinic a year ago on account of progressive shortness of breath and associated cough with wheeze. He had a significant smoking history of about 40packyears. He was diagnosed with severe COPD with FEV1 of 0.63(L): 22% predicted, FEV1/FVC: 0.61 and reversibility of 2 %.The MRC dyspnea score and CAT score were 3 and 30 respectively at presentation. He was placed on LABA/ICS combination and SABA as needed. The option of Tiotropium was declined because of the cost. He also did not support the option of pulmonary rehabilitation because of the cost. The use of domiciliary oxygen was also seen as a taboo and therefore rejected. However the patient significantly deteriorated within six months with about four exacerbations despite increasing the dose of the SABA. The fourth exacerbation necessitated a prolonged admission during which he got financial support to have sixteen sessions of pulmonary rehabilitation, procure Tiotropium 18mcg daily, twice weekly Azithromycin 500mg, domiciliary oxygen at 2L/min and roflumilast which was initially commenced at 250mg for one month and then 500mg daily. He was then discharged after 2 weeks of admission with the plan to continue with the LABA/ICS and the new regimen introduced at home. He got pneumococcal conjugate 13 vaccine on outpatient basis. At four and eight weeks follow up, he was noticed to have made significant improvement. The compliance level for Domiciliary oxygen was about 10hours per day with the saturation at rest ranging between 92-95% while he needed only 1-2L/min to maintain 88-92% on mild to moderate exertion. The level of exercise tolerance and activities also improved. The lung function slightly improved with FEV1 up to 0.84(L):30% predicted and he was free of any other exacerbations in three months after discharge.

Discussion: This case was reported in a patient with significant smoking history with attendant multiple comorbidities and poor prognostic factors at presentation. There are di erent parameters that have been described to define the prognosis of patients with COPD. The commonest include the level of exercise tolerance, daily symptoms and risk of exacerbations. The patient described herein had increased risk of such at presentation. The commencement of the disease modifying drugs was delayed due to financial constraints and certain perceptions of the patient. The delay caused further deterioration in the condition of the patient. However, there was an improvement in his condition following commencement of the disease modifying therapies. In conclusion, disease modifying therapies should be considered to halt the disease progression and provide consistent and sustained improvement in the structural and functional parameters of patients with severe COPD. There is need to increase advocacy to make medications easily available. COPD medications should be on the list of insurance covered treatment.

Keywords: COPD, Disease Modifying therapies

PROFILE OF ACUTE SEVERE ASTHMA PRESENTATION IN THE EMERGENCY ROOM OF A TERTIARY HOSPITAL IN SOUTH- EASTERN NIGERIA

Uduma VU[1*], Igwenyi C[1], Ukwaja KN[1], Odilinye H[1], Onyedum CC[2]

1. Department of Medicine, Alex-Ekwueme Federal University Teaching Hospital Abakaliki, Nigeria.
2. Department of Medicine, Coll,ege of Medicine, University of Nigeria Enugu Campus.

*** Corresponding author email**: udumavictor8@gmail.com

Background: Acute severe asthma is the progressive worsening of relevant symptoms and lung function from baseline su cient enough to require change in treatment. This is a common cause of hospital emergency room visits, with consequent increase in the risk of Asthma-related death. Furthermore, the quality of asthma care is generally unsatisfactory in the Nigerian care settings, with low levels of adherence to asthma management guidelines: an indicator of increased likelihood of asthma exacerbation. This inadequate attention is an important factor in asthma morbidity and mortality. Hence, the need to profile the pattern of acute severe asthma in our practice.

Objective: This study aimed at reviewing the prevalence and pattern of acute severe asthma presentation at the medical emergency room of Alex Ekwueme Federal University Teaching hospital Abakaliki, Nigeria .

Methods: This is a hospital-based retrospective review of the emergency room's medical records of 444 respiratory conditions seen over eleven months (from November 2018 to September 2019) for acute severe asthma cases. In addition to the information on socio-demographic parameters retrieved for all the cases, further analysis of the pattern of presentation was carried out on 7 cases, that had complete information.

Results: Of the total of 444 respiratory conditions seen in the adult emergency room during the period under review, those with acute severe asthma were 53. The prevalence of acute severe asthma was 11.9% and majority of them were females (60.4%). Their mean age was 36.20 years; with a great majority (80.6%) being ≤ 50 years of age. Further study of those for whom the full complements of details were present revealed that, shortness of breath (100%) and cough (100%) were the commonest presenting symptoms. The triggers of attacks identified were external agents: smoke fumes (31.5%); environmental dust (25%); strong perfumes(18.8%); cold weather (18.8%)and beans (6.3%). About 83.3% had seen a doctor in the past before exacerbation, but none had seen a Pulmonologist. Most were previously on oral medications for their asthma: salbutamol tablet (50%), Ephedrine plus theophylline tablet (25%) and prednisone tablet (10%). Nearly all (85.7%) of the patients at discharge from the emergency room had inhaled ICS plus LABAA and as needed salbutamol prescribed. About 50% of them were subsequently being seen in the pulmonology clinic, 50% of whom have had spirometric evaluation done.

Conclusion: The burden of acute severe asthma in our emergency room was substantial, with all the presenting cases having previously seen a doctor but a Pulmonologist in the past prior to exacerbation and presentation to our ER. Our local experience mirrors the suboptimal quality of asthma care nationally. Uptake of asthma management guidelines is generally poor except among physicians and Pulmonlogists. Hence, there is need to organise CMEs on current asthma care by hospital management and professional associations, and public awareness creation campaign on asthma symptoms and care by stakeholders. However, this study is limited by the poor record keeping in our ER.

Keywords: Acute severe asthma, Emergency room, Pattern, Prevalence, Nigeria

A REPORT OF ALLERGY SENSITIZATION PATTERN IN ASTHMA PATIENTS ATTENDING A PRIVATE CLINIC IN ENUGU SOUTH EAST NIGERIA

Ayuk Adaeze C[1,2], Ndukwu Ifeyinwa C[3], Nwosu Nnamdi I.[4]

1. Department of Pediatrics, College of Medicine University of Nigeria Enugu Campus.
2. University of Nigeria Teaching Hospital, Enugu, Nigeria;
3. Department of Pediatrics, Nnamdi Azikiwe University, College of Health Sciences Nnamdi Azikiwe University Awka Anambra State.
4. Department of Medicine University of Nigeria Enugu Campus/ University of Nigeria Teaching Hospital, Enugu, Nigeria.

Introduction: Asthma is a disease with a spectrum of phenotypes and endotypes and varied therapeutic outcomes. Asthma can occur without any signs of allergy; and measurable sensitization does not translate to presence of allergic disease. However, the knowledge of sensitization patterns informs counselling with aim of reducing co-morbidities associated with asthma which eventually translates to better asthma control. Furthermore, optimization of skin prick test (SPT) panels, especially where cost e ectiveness is a concern, is an unmet need in Nigeria.

Objectives: We set out to assess the patterns and clinical relevance of aeroallergen sensitizations in asthma patients attending a private health facility. This would hopefully serve as a pilot guide for physicians in choice of battery of skin prick aeroallergen tests when assessing patients with asthma in the sub-region and beyond.

Materials & Methods: This was an initial data of a cross-sectional observational study where consenting eligible participants were consecutively enrolled. A battery of allergens (House dust mite (HDM): D.pteronyssinus and D. farina; dog dander, mixed feathers, cockroach, aspergillus mould and grass mix were placed at marked sites on the volar surface of the forearm, and sterile lancets used on each allergen substance to introduce the allergen into the surface layer of the skin and then observed 15 minutes later for wheals. A mean wheal diameter of 3mm or more (greater than saline control) was considered to be a positive sensitisation to an allergen. Histamine and normal saline were used to standardize the tests.

Results: A total of 30 tests were done between March and September 2019 (7 months). The mean age of all participants was 14.2 (+9.8) years, with equal male to female ratio. Majority (90%) had AR co-morbidity with asthma. Twenty-six patients had at least one positive skin prick reaction and demonstrated unique sensitization patterns by stratification with age and gender. Sensitization to house dust mites (HDM) was highest (mean diameter 6mm), whereas the three most prevalent aeroallergens were D farina, Aspergillus mould and mixed feathers. Higher sensitization rates and multiple sensitizations were associated with AR comorbidities. Significantly, more males tested positive to mixed grass sensitization, ($X2 = 3.968$, $p = 0.046$) and aspergillus sensitization ($X2 = 6.652$, $p = 0.010$)

Conclusion: House dust mite was the most prevalent in our participants and SPT panels may provide a cost-e ective tool for screening sensitized asthma patients with co-morbidity of allergic rhinitis as this will impact on better asthma control. Further studies are recommended to asses for predictors of positive skin prick test in patients with asthma..

PATTERN AND TRIGGER FACTORS OF ASTHMA EXACERBATION IN CHILDREN SEEN AT USMANU DANFODIYO UNIVERSITY TEACHING HOSPITAL, SOKOTO.

Garba B.I[1], Sani U.M.[1], Isezuo K.O.[1], Waziri U.M.[1], Abubakar F.I.[1]

1. Department of Paediatrics, Usmanu Danfodiyo University Teaching Hospital, Sokoto bgilah@yahoo.com

Conflict of interest- None

Background: Asthma exacerbation (also called flare up or attack) is common and can be fatal. It is common and more severe when asthma is uncontrolled but can also occur in patients taking asthma treatment. Knowledge about trigger factors will assist clinicians and parents to adequately manage the condition.

Aim: To determine the pattern and trigger factors of acute exacerbation of asthma in children presenting to Usmanu Danfodiyo University Teaching Hospital (UDUTH), Sokoto, Nigeria.

Materials and methods: A descriptive, cross sectional study of children with acute asthma exacerbation presenting to the Pulmonology clinic and Emergency Paediatric Unit of UDUTH, Sokoto over a one year period. Relevant clinical information was documented in a structured questionnaire. Asthma exacerbation severity was determined using the Global Initiative for Asthma (GINA) guidelines.

Results: There were 53 presentations with 29(54.7%) being males, giving a M:F ratio of 1.2:1. Mean age was 62.43±40.53 months and 31(58.5%) were aged between 1-5 years. Majority 30(56.6%) presented during the rainy season with 46(86.8%) having an identifiable trigger factor. Exposure to cold 27(50.9%) and acute respiratory tract infections 21(39.6%) were the predominant triggers. Only 25(47.2%) took short acting Beta agonist (SABA) before presentation. Most cases 38(71.7%) had mild exacerbation and majority 45(84.9%) were discharged <12 hours. Male gender was not associated with severity of exacerbation ($p = 0.811$) but associated with hospitalisation beyond 48 hours ($p=0.020$). All patients were discharged with no mortality recorded.

Conclusion: Majority were males, aged 1-5 years presenting during the rainy season with an identifiable trigger factor. Mild asthma exacerbation was the commonest type with no mortality documented.

Keywords: Asthma, children, exacerbation, trigger, Sokoto

INVASIVE PULMONARY CRYPTOCOCCAL FUNGAL INFECTION MASQUERADING AS LUNG TUMOUR WITH BRAIN METASTASIS

Chidiebere Peter Echieh[1], Chimaobi I. Nwagboso[1], Stephen O. Ogbudu[1], Nkemakolam John Eze[1], Anietimfon U. Etiuma[1], Okon O. Bassey[1], Ernest A. Ochang[2], Paul Jibrin[3]

1. Division of Cardio-thoracic & Vascular surgery, Department of surgery,
2. Department of Microbiology, University of Calabar/University of Calabar Teaching Hospital, Calabar, Cross River State.
3. Department of Pathology, National Hospital Abuja, University of Abuja, Nigeria.

Background: Pulmonary Cryptococcosis is caused by C. neoformans species complex in the fungal phylum Basidiomycota. Pulmonary cryptococcosis goes mostly unrecognized by many clinicians. This delay in diagnosis, or misdiagnosis, of lung infections is due to frequently subtle clinical manifestations, broad di erential or diagnostic possibilities for associated pulmonary masses (cryptococcomas) and, on occasion, negative respiratory tract cultures.

Aim: We present a case of Cryptococcosis which masqueraded as lung cancer with pseudo – metastases to the brain.

Case Report: Thirty year old male farmer presented with complaints of recurrent headache of 1yr duration with associated progressive weight loss, persistent di culty in breathing, cough and, dizziness. Chest and brain CT Scans showed masses in right middle lung lobe and the cerebellum. A diagnosis of lung cancer with metastases to the brain was made. Histology of lung biopsy showed numerous oval shape thick walled yeast form of a fungal organism identified as Cryptococcus neoformans following PAS staining. He was treated with antifungal. He made clinical recovery with negative CSF and pulmonary fungal cultures and residual radiographic abnormalities.

Conclusion: Many conditions are known to present clinically and radio-logically as lung cancer. Pulmonary Cryptococcosis is a di erential diagnosis of lung mass. Cerebral dissemination with formation of intra-cranial cryptococcoma may give a clinical picture similar space occupying lesion from metastases. A high index of suspicion is required for diagnosis.

Keywords: Pulmonary cryptococcosis, metastatic brain tumour.

A FIVE-YEAR RETROSPECTIVE REVIEW OF DRUG RESISTANT TUBERCULOSIS IN A TREATMENT CENTRE IN ZARIA, NORTH WESTERN NIGERIA

Jiya E.N.[1*], Adeiza MA[2], Olorukooba A[3], Adamu SA[1], Zakari SM[1], Zoaka GB[4], Abba AA[2], Okpapi JU[2]

1. Department of Hospital Services, National Tuberculosis and Leprosy Training Center, Saye, Zaria
2. Pulmonology Unit, Department of Medicine, College of Medical Sciences, Ahmadu Bello University Teaching Hospital, PMB 06 Shika, Zaria
3. Department of Community Medicine, College of Medical Sciences, Ahmadu Bello University Zaria
4. Records, Monitoring and Evaluation unit National Tuberculosis and Leprosy Training Center, Saye, Zaria

Corresponding author email: nnaisa18@yahoo.co.uk

Introduction: Drug-resistant tuberculosis (DR-TB) is emerging as a major clinical and public health challenge in areas of sub-Saharan Africa and is becoming a key challenge in ending tuberculosis. In Nigeria a high TB burden country, the National TB program leads the response to DR-TB at various centers and it is potentially curable if diagnosed early and treated promptly. As treatment is scaled up, it becomes necessary to review the pattern of DR-TB in Nigeria.

Objectives: The aim of the study is to describe the socio-demographic profile, clinical pattern, types and outcome of drug resistant pulmonary TB treatment among patients admitted at a treatment center in Zaria, North Western Nigeria.

Methods: We conducted a retrospective study on the medical records of patients in the DR-TB ward of the National TB and leprosy Training Centre, Saye, Zaria from January 2014 to December 2018. Data was collected on age, sex, TB symptoms, previous TB treatment, drug resistance pattern, drug side e ects, HIV status and outcome. Frequency and percentages were used for categorical variables while summary statistics e,g median, for numeric variables.

Results: Ninety patients were admitted with diagnosis of DR-TB during the period under review. Males were 72 (80%), females 18 (20%) and median age was 32 years. All patients had cough. Fever and weight loss was present in 89 (98.8%) and 80 (88.9%) respectively, while 24.4% had haemoptysis. Sixty three (70%) of patients had previous TB treatment of which 7 (7.8%) had been treated 3 times. Thirteen (14.4%) of patients tested positive for HIV. Rifampicin resistance was detected in 86 (95.5%) and Isoniazid resistance/MDR-TB detected in 36 (40%) of patients. The commonest drug side e ects were gastritis/GI bleeding. Outcome was cure in 64 (71.1%) with mortality of 22 (24.4%).

CONCLUSION: Drug resistant TB disproportionately a ected men in this study. Treatment side e ect is common and mortality is high. There is need for more public health e ort in the prevention, diagnosis and treatment of DR-TB.

Key words: DR-TB, tuberculosis, Zaria

PULMONARY TUBERCULOSIS PRESENTING INITIALLY WITH ASTHMA SYMPTOMS: A CASE REPORT

Uduma VU[1*], Igwenyi C[1], Ukwaja KN[1], Odilinye H[1], Onyedum CC[2]

1. Department of Medicine, Alex-Ekwueme Federal University Teaching Hospital Abakaliki, Nigeria.

2. Department of Medicine, College of Medicine, University of Nigeria Enugu Campus.

Corresponding author email: udumavictor8@gmail.com

Introduction: Tuberculosis still remains a huge burden in developing countries despite global e ort to curtail the disease and the gains already made. TB has myriads of clinical presentations and initial none TB symptomatology does not entirely exclude its diagnosis. Further, nonspecific presentations and being misdiagnosed as bronchial asthma can delay the diagnosis of Pulmonary TB. In addition, various clinical conditions can mimic asthma, including pulmonary tuberculosis. Hence, we present a case of pulmonary tuberculosis presenting initially with asthma symptoms in a patient not previously known to have obstructive lung disease.

Summary of Case: A 44-year old female nursing sta , apparently without any previous health issues was referred from the general outpatient clinic with complaints of nocturnal wheezing, dry cough, chest tightness and shortness of breath of 2 months duration. Her physical examination was however, unremarkable. A diagnosis of bronchial asthma was made and she had spirometry and chest X-ray requested. Patient was placed on as needed SABA and twice daily preventer inhalers without significant improvement. At next visit, her spirometry result revealed a mixed ventilatory pattern and her radiograph showed bilateral hilar fullness with minimal bilateral pleural e usion. She also had a history of low grade fever. The result of HRCT showed multiple enlarged mediastinal, paratracheal, subcarinal and hilar lymph nodes, and mild bilateral pleural e usion. Other results revealed she was HIV negative, had elevated ESR and GeneXpert test was negative. A mini-thoracotomy was done with excised lymph nodes revealing caseating granulomas and Ziehl-Neelsen's staining showing acid-fast bacilli. The diagnosis of Tuberculosis was confirmed, warranting the commencement of anti-TB medications. Patient was subsequently seen in the clinic 3 weeks hence, with good clinical improvement. Her wheezing had stopped, cough frequency substantially reduced, fever abated, with improved e ort tolerance. However, she still complains of pain at the thoracotomy site.

Conclusion: Tuberculous presentations can take myriad of forms, including presenting with airways obstructive symptoms. And considering that asthma and COPD are common in the chest physician's practice, the chances of missing TB diagnoses are high with attendant adverse public health implications. Hence, there is need to sustain a high index of suspicion for TB and for patients to be seen on a case-by-case merit.

Keywords: Pulmonary Tuberculosis, asthma symptoms, myriad of presentations and missed diagnosis

PULMONARY ASPERGILLOMA - WHEN THE FLOW REFUSES TO CEASE : A TWO CASE REPORT

Andero .V[1], Awopeju F.O[1], Adewole O.O[1], Erhabor G.E.[1]

1. Department of Internal Medicine, Obafemi Awolowo University Teaching Hospitals, Ile-Ife, Osun State, Nigeria.

Introduction: In developing countries, Aspergillomas are often misdiagnosed most times as tuberculosis and in most patients diagnosis is clinical. Prompt diagnosis and treatment relieves the patient of unnecessary use of antituberculosis drugs and improvement in quality of life. We present two cases with haemoptysis that have been receiving treatment for tuberculosis but found to have Aspergilloma.

Case Report: The first case is a 50 year old male driver who presented in December 2018 on account of three (3) months persistent productive cough, chest pain, night sweats and a month history of non-massive haemoptysis of a month. He had received antituberculosis drug despite negative GenXpert/ AAFB. However, cough and haemoptysis continued. Chest CTscan was some which showed cystic cavities in the right middle and lower lobe with heterogenous non enhancing lesion and crescent air lucencies. Patient had bronchoscopy done with bronchio alveolar lavage fluid which was negative for fungal hypea. He was commenced on antifungal and he has made improvement. The second case was a 73 year old female farmer who presented in May 2019 on account of recurrent cough with haemoptysis of four (4) months, right sided pleuritic pain, occasional dyspnea and weight loss of two (2) months. She had been treated for TB on two occassions and already commenced on treatment for TB. Chest CT scan showed a cavity with fungal ball in the right upper lung lobe. Bronchiolalveolar lavage fluid showed Aspergillus terreus. She was commenced on antifungal. Haemopytsis had resolved, and was scheduled for surgery. This case report is to heighten our suspicion of a broad di erential diagnosis in patients with symptoms of TB with negative sputum result and peculiarities of treating aspergilloma.

Conflict of Interest: No conflict of interest in the case report

Acknowledgements: I am grateful to the patients for granting consent to present the case reports.

RESILIENCE AND ITS RELATIONSHIP WITH ANXIETY, DEPRESSION, STRESS AND QUALITY OF LIFE AMONG PATIENTS WITH PULMONARY TUBERCULOSIS IN SOUTH-WESTERN, NIGERIA.

Arawomo A.O.[1], Awopeju O.F.[2], Erhabor G.E.[2] Akinsulore A.[3], Erhabor J.O.[2]

Background: Psychological comorbidities contribute to the burden of tuberculosis and impact on the outcome of disease.

Objective: This study aimed to measure resilience and its relationship with anxiety, depression, stress and quality of life among pulmonary tuberculosis (PTB) patients.

Methods: 159 patients with PTB were consecutively recruited from the respiratory clinic of Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife in a cross-sectional, descriptive study. Subjects completed a self-administered questionnaire containing socio-demographic characteristics and clinical variables, Connor-Davidson Resilience Scale 10-Item (CD-RISC-10), Depression, Anxiety and Stress Scale (DASS-21), and WHOQOL-BREF.

Results: Mean age of respondents was 45.7±13.55years, 98 males (58.5%) and mean duration of illness was 4.0 ± 4.84 months. The prevalence of anxiety was 54.7%, depression 12.6%, and stress 15.7%. 51.6% of respondents had low to moderate resilience compared with high resilience and reported higher levels of anxiety (n=70, 80.5%, $\chi 2$: 64.19, $p<0.001$), depression (n=18; 90%; $\chi 2$: 13.53, $p<0.001$) and stress (n=24, 96%; $\chi 2$: 23.44, $p<0.001$) with FET 0.01. The level of resilience decreased as the age increased (from 58% to 20%; $\chi 2$: 9.17, $p<0.001$). The lowest quality of life (QoL) score was in the psychological domain. There was a significant weak to moderate negative correlation between anxiety, depression and stress, and resilience (r ranges from -0.293 to -0.459) with significant moderate to strong positive correlation between the domains of QoL and resilience (r ranges from 0.462 to 0.607). Conclusion: High levels of anxiety, depression and stress, and low self-perceived quality of life is associated with low to moderate resilience among PTB patients.

Conflict of Interest: The authors declare no conflict of interest.

TWO YEAR REVIEW OF TUBERCULOSIS PREVENTIVE THERAPY (TPT) IN HIV INFECTED ADULTS ACCESSING ANTI-RETROVIRAL THERAPY IN A TERTIARY HOSPITAL, KADUNA.

Ogunsina MA[1], David AS[1], Abba AA[1]

1. Department of Medicine, Barau Dikko Teaching Hospital, Kaduna, Nigeria

Corresponding email: arinolaprecious@yahoo.com

Background: Tuberculosis (TB), a major public health problem, is responsible for a considerable number of human immunodeficiency virus (HIV) related deaths. Inclusion of isoniazid (INH) as one of the preventive therapies in HIV management is one of the interventions for the prevention of TB in HIV infected individuals. However, in Nigeria the programme implementation has not been optimal.

Objectives: To assess the e ectiveness and tolerability of INH and also incidence of TB and among People Living with HIV (PLWHIV).

Methods: A retrospective cohort study of clients who assessed INH in 2015 was conducted in Barau Dikko Teaching Hospital Kaduna, Northwest Nigeria using medical records available. The clients' records followed up for two consecutive years to see if any of them developed TB.

Results: A total of 376 clients were studied, 117(31%) males; 257 (76.9%) married; mean age 37.3 ± 10.9 years; 148 (41.5%) in WHO stage 1, median CD4+ cell counts at start and end of INH were 394.0 cells/µl (IQR 228.0 - 571.3) and 457.0 (IQR 317.5 – 645.0) respectively. Incidence of TB was 1.5 and 7.3 per person year ($p<0.005$) in those that completed INH and those that did not respectively. There were few side e ects reported, commonest being dermatitis.

Conclusion: TPT was associated with significant reduction in risk of developing tuberculosis in PLWHIV and it was also well tolerated. More e orts should be directed at enforcing the widespread use and completion of INH.

Keywords: Tuberculosis preventive therapy, Incidence, TB, Isoniazid, PLWHIV

Conflict of Interest: There are no conflicts of interest

BIOCHEMICAL CHANGES IN TUBERCULOSIS INFECTION AMONG PATIENTS IN SOUTH EASTERN NIGERIA

Ufoaroh CU[1], Onwurah CA[1], Mbanuzuru A[2], Mmaju C[3], Chukwurah SN[1], Umenzekwe C[1], Aghanya I[4], Ushie SN[4], Aneke SP[1], Anyabolu AE[1], Enemuo EH[1], Ele PU[1]

1. Department of Medicine Nnamdi Azikiwe University

2. Department of Community Medicine Nnamdi Azikiwe University Teaching Hospital Nnewi.

3. Department of Physiology Nnamdi Azikiwe University.

4. Department of Microbiology, Nnamdi Azikiwe University

Background: Tuberculosis remains a global health issue with high morbidity and mortality especially in developing countries. Tuberculosis and drugs used for TB treatment have been documented to be associated with metabolic and biochemical changes.

Aim: The aim is to determine the e ect of tuberculosis and anti tuberculous agents on serum levels of some biochemical parameters in patients with smear positive tuberculosis. Methods: It was an observational cohort study conducted on a total of 150 blood samples collected in equal proportions from consenting participants, including 50 smear positive cases not on treatment, 50 healthy controls without TB, and 50 who have completed 2 months intensive phase , those with co morbidities were excluded. Urinalysis was also done to exclude overt kidney damage. Data was analyzed using SPSS version 20.

Results: Total of 150 blood samples,50 new Tuberculous cases not on drugs,50 from TB cases who have completed 2months of intensive therapy, 50 from healthy control non tuberculous patients, Male:female 1:1.5 with mean age of 37.1±0.92, range 18-65years.Serum potassium was highest in TB new cases with mean of 4.6±0.94.The mean di erences in potassium levels among the groups was not statistically significant (p- value=0.056), while that for albumin, calcium and sodium were all statistically significant at (p-value<0.001).Pearson correlation test shows a weak negative relationship between potassium and albumin, as (r=-0.122); while Albumin showed a weakly positive relationship with calcium and sodium (r=0.420 and 0.319). Tuberculosis has independent association with changes in some biochemical parameters e.g. sodium, albumin and calcium.

Conclusion: Tuberculosis and anti-tuberculous agents were found to significantly a ect some biochemical parameters.

Keywords: Biochemical, Tuberculosis, South-Eastern.

EMPYEMA THORACIS IN CALABAR: THE CARDIO-THORACIC SURGERY DIVISION EXPERIENCE

Etiuma, AU[1*], Nwagboso CI.[1] Echieh C.[1], Ogbudu S[1], Antia, SE[1], Bassey OO[1].

1. Cardiothoracic and vascular division, University of Calabar/UCTH, Calabar.

* **Corresponding author email**: auetiuma@aol.com, 08033573255.

Introduction: Thoracic empyema is a major cause of morbidity and varying mortality, especially in Africa where tuberculosis and community acquired pneumonia, and chest injury is prevalent.

Objective: To determine the pattern of presentation, causes and treatment outcomes of patients with empyema thoracis in Calabar.

Method: A 12 year retrospective review (2008-2019) was carried out on all patients managed for empyema thoracis in the Cardiothoracic Unit of University of Calabar Teaching Hospital, Nigeria. Demographics, clinical data, microbiology, treatments and outcomes were obtained from records. Statistical analysis was performed.

Results: Patients (n=74) were predominantly male 77% (n=57). Age range 0-80years. Aetiologies of empyema thoracis were community acquired Pneumonia (51.4%), blunt/penetrating injury (21.6%), tuberculosis associated (17.6%) and others. Two thirds were right sided (63.5%), while 6.8% were bilateral. Most common symptoms at presentation were dyspnoea (62.2%), cough (58.1%) and chest pain (52.7%). Microbiologic isolates were obtained for 31 (41.9%) patients and were mainly polymicrobial in patients with community acquired pneumonias irrespective of RVD status. Coliforms/enterobacteriacae accounting for 20.8% of isolates, Pseudomonas aeruginosa 8(16.7%). 79.7% had tube drainage, 16.2% had open thoracotomy and decortication, 8.1% had antibiotics only, 2.7% had VATS. 14.9% had complications. Mortality was 5.4% with community acquired pneumonia accounting for 50%.

Conclusion: Empyema thoracis is a significant cause of morbidity worldwide. Microbiological isolates were polymicrobial. Prognosis for tuberculosis associated empyema is favourable. RVD status did not confer any increase in mortality compared to other empyema patients.

Keywords: Empyema thoracis, chest infection, Retroviral infection, VATS.

TARGETED ACTIVE CASE FINDING FOR TUBERCULOSIS IN CHILDREN IN AN URBAN COMMUNITY IN NIGERIA - PRELIMINARY FINDINGS

Ewa AU[1], Cobham A[1], Onwuteaka C[2], Usoroh E[2], O or B[3]

1. Department of Paediatrics, University of Calabar/Teaching Hospital, Calabar
2. KNCV Nigeria/Challenge TB
3. State Tuberculosis and Leprosy Control Programme, Cross River State

Background: Tuberculosis (Tb) in children still remains largely undiagnosed and under-reported. The best control strategy is debatable, with passive case finding (PCF), active case finding (ACF), household contact investigations (HCI), singly and in combinations having variable outcomes. The Nigerian Tuberculosis and Leprosy Control Programme (NTBLCP) focuses mainly on PCF in health facilities with persistently low case detection in children and again intensified case finding activities by Tb Partners targets mainly health facilities with poor results. Although evidences exist that ACF increases Tb case detection, fears of cost-e ectiveness prevent its acceptance. This study targeted a community with sputum positive adults and seeks to identify TB in children living within that area.

Methods: A descriptive cross-sectional study, in a community with documented sputum positive adults on treatment and having children living with them. Data were analysed using SPSS version 23.

Results: Preliminary findings showed eighty seven children seen and examined, ages ranged from 4 months to 14 years and a mean of 4.9 ±3.2. The male: female ratio was 1:1.1. All were asymptomatic and two (2.3%) had chest signs without cough nor fever. The Mantoux test results ranged from 0-20mm with a mean of 3.46±1.1. Results 10mm were found in 18.75% of the children. Chest X- rays (CXR) were performed by 46/87(52.8%) of the children and 21/46 (45.6%) of them had abnormal results with 17/46(37%) eventually receiving Tb treatment. CONCLUSION: Active case finding in endemic areas is useful and should be adopted for implementation on a larger scale along with passive case finding in health facilities for e ective Tb control.

Keywords: active case finding, passive case finding, tuberculosis, contact investigations

SILICOSIS MISDIAGNOSED AS SEVERE ASTHMA IN A GOLD MINER FROM ZAMFARA, NORTH-WESTERN NIGERIA.

Abbas A[1], Tambuwal H.S[1], Yunusa G.H[2], Mande K.M[1], Wasagu M.I[1]

1. Department of Medicine, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria

2. Department of Radiology, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria

Correspondence author email: aminuab@gmail.com

Background: Silicosis is an occupational fibrotic lung disease resulting from inhalation of silica dust. Gold mining is one of major occupations associated with development of silicosis.

Case summary: We present H.B, a 35-year-old gold miner who presented to our unit on account of recurrent cough and progressive shortness of breath of 1.5- and 1-year duration respectively. He received treatment for bronchial asthma from a private hospital for 2 months with no significant improvement. He has been mining gold at one of the gold mines in Maru, Zamfara state for 20 years but stopped a year ago on account of worsening breathlessness. On general physical examination, he was found to be in respiratory distress and centrally cyanosed with an SPO2 of 86% on room air. Examination of the chest revealed right apical flattening with tracheal deviation to the right and widespread wheezes and crackles all over lung fields. Spirometric measurement revealed restrictive abnormality. Radiological examination by way of chest x-ray shows bilateral upper and mid zones homogenous opacities and 'tenting' of the left hemidiaphragm. Chest CT scan shows dense soft tissue masses in the upper lobes bilaterally with areas of calcifications including an 'egg shell' calcification on the right hilar region. A diagnosis of silicosis with progressive massive fibrosis was made. He was placed on nebulized levosalbutamol/ipratropium bromide and steroids and was optimized on oxygen therapy. He was subsequently counseled on the need to change occupation.

Conclusion: Silicosis as one of the many causes of progressive fibrosis exists in our unregulated mining communities. The need for vigilance by clinicians and regulatory authorities is hereby emphasized.

SMOKING PREVALENCE AMONG PRE-CLINICAL MEDICAL UNDERGRADUATES AND HEALTH PROFESSIONAL STUDENTS OF COLLEGE OF HEALTH SCIENCES NAU NNEWI

Ufoaroh CU[1], Anyabolu AE[1], Enemuo EH[1], Aneke SP[1], Onwurah CA[1], Nwokolo C[1], Chinweuba IS[2], Ele PU[1]

1. Respiratory unit, Department of Medicine NAUTH Nnewi.
2. Department of medicine COOUTH Awka

Background: Cigarette smoking is a Group 1 carcinogen and a major global health concern despite being a preventable cause of morbidity and mortality.

Objective: The objective of this study was to determine smoking prevalence among preclinical and health professional undergraduates, their reasons for smoking and their knowledge of its health consequences.

Methods: This was a cross sectional study of 277 students using a self-administered semi-structured questionnaire administered over three weeks. The questionnaire contained 14 questions assessing their socio- demographic characteristics, smoking practices and perceptions.

Results: The mean age of participants was 21.47±2.34, 58.3% were females, and majorities were second (2nd) year students. Eighty-five percent of the students were from Medical Laboratory Science, Physiology, Physiotherapy and Medicine. Only descriptive analysis was done due to low smoking prevalence finding. Seven (2.5%) of the participants were current smokers, though 35(12.7%) reported to have smoked in the past and stopped. The mean age of participants at first exposure was 15.78±5.02 and the major reasons for smoking were peer pressure (35%), depression (20%) and stress (25%). Interestingly, 15 students (5.4%) reported that smoking has some health benefits; 84% of the students had good knowledge of the health dangers of cigarette smoking and this was the major reason for quitting smoking or not smoking.

Conclusion: Smoking prevalence was low among these undergraduates. Peer pressure, stress and depression were the main reasons for smoking, and greater proportion had good knowledge of the health consequences of cigarette smoking.

Key Words: Prevalence, cigarette smoking, preclinical medical and health professional study.

PATTERN OF RESPIRATORY CONDITIONS SEEN IN THE MEDICAL EMERGENCY ROOM OF ALEX-EKWUEME FEDERAL UNIVERSITY TEACHING HOSPITAL ABAKALIKI (AEFUTHA), NIGERIA

Uduma VU[1*], Igwenyi C,[1] Ukwaja KN[1], Odilinye H,[1] Onyedum CC[2]

1. Department of Medicine, Alex-Ekwueme Federal University Teaching Hospital Abakaliki, Nigeria.
2. Department of Medicine, College of Medicine, University of Nigeria Enugu Campus.

*** Corresponding author email**: udumavictor8@gmail.com

Background: Respiratory conditions constitute a considerable proportion of the medical emergency room presentations. These diseases have been under-reported, despite their being prevalent with substantial mortality. In Nigeria, like in most low and middle income countries, respiratory diseases place a huge burden on the healthcare system. However, to the extent of our literature search, there was no report on the burden of respiratory conditions presenting to the ER in south-eastern Nigeria.

Objective: The aim of this study was to determine the prevalence and pattern of respiratory conditions presenting at the medical emergency room of AEFUTHA.

Method: This is a retrospective review of the adult emergency room's medical records using a pro forma, which collected details of respiratory conditions from November 2018 to September 2019, including the socio-dermographic parameters. And the data collected was analyzed.

Result: A total number of 3,289 patients were seen over the study period. Of this, those with respiratory conditions were 444. The prevalence of respiratory diseases in the medical emergency was 13.5% and about 54.5% of them were males. Their mean age was 49.5 years, with the most respiratory emergencies (18.2%), seen in those aged 51 to 60 years. The pattern of presentation of the respiratory conditions were as follows: community acquired pneumonia (42.1%); Pulmonary Tuberculosis (21.6); Acute exacerbation of chronic obstructive pulmonary disease (12.4%); Acute severe Asthma (11.9%); Aspiration pneumonitis (4.5%); Pleural e usion (4.1%); Disseminated tuberculosis (2.7%); and Empyema thoracis (0.7%).

Conclusion: The prevalence of respiratory conditions was substantial and contributes enormously to the overall medical emergency room admissions. Lung infections remain the highest disease burden in our setting. Recommendations are therefore made for policy makers to redouble e orts at preventative measures of vaccination, control of air pollution, promotion of good housing/living places, interval antimicrobial sensitivity pattern surveillance and ensuring a robust presence of Respiratory Physicians in our hospitals through a well entrenched subspecialty training.

Keywords: Respiratory conditions, Emergency room, Pattern, Prevalence, Abakaliki.

SARCOIDOSIS MISDIAGNOSED AS TUBERCULOSIS

Ogunsina MA[1], Nuhu NY[1], Abba AA[1]

1. Department of Medicine, Barau Dikko Teaching Hospital, Kaduna

Corresponding author email: arinolaprecious@yahoo.com

Introduction: Sarcoidosis is a chronic inflammatory multisystem disease, most commonly involving the lungs. Due to its clinicoradiological resemblance with tuberculosis (TB), in countries such as Nigeria, sarcoidosis is often misdiagnosed and mistreated as TB.

Case Report: A 38 year old security o cer who presented to the clinic with cough, chest pain, weight loss, and di culty with breathing for 7 months. He had been evaluated in the peripheral hospital where sputum AAFB and genexpert were reported to have been negative but was started on treatment for TB on clinical grounds for 2 months with minimal improvement necessitating his referral. Examination revealed few coarse crepitations in his right infrascapular area. Other systemic evaluations including the eyes were normal. Chest X-ray revealed heterogenous multinodular opacities involving the right-mid, part of the lower zone and left- mid zone, mantoux negative, haemoglobin 18.6 g/dl, total leukocyte count 5100/µl, erythrocyte sedimentation rate 52 mm/hr, fasting blood glucose 4.0mmol/l, normal renal function tests with elevated alkaline phosphatase 252IU/l. Serum calcium and albumin levels were normal, urine calcium and 24hr urine calcium were elevated (5.13mm/l and 8.3mmol/24hr) respectively. Serum angiotensin converting enzyme (ACE) level was elevated 153 u/l (8–52 u/l). Hence, a possibility of sarcoidosis was considered. Lung biopsy showed nodular non-caseating granulomas. He was started on Prednisolone with remarkable improvement.

Conclusion: Diagnosing sarcoidosis in countries with high-TB burden does pose a significant challenge because of its resemblance to TB. Therefore, in bacteriologically negative TB suspects, all e orts should be made to reach a definitive diagnosis.

Conflict of Interest: No conflicting interest.