**P6-10 | Mysterious nodule in the spermatic cord in an immunosuppressed patient – An executive’s agony**

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Introduction: TB involving spermatic cord is a very rare phenomenon which is rarely described.

Case Report: A 51 year old executive presented with right sided gradually increasing testicular swelling for 6 months which was associated with mild pain. There was no history of fever, leg swelling or a chronic cough. He has been investigated for altered bowel habits and was diagnosed to have eosinophilic enteritis and was on steroids and Azathioprine for a period of one year prior to this event. On examination he was averagely built (BMI- 24Kg/m²) without lymphadenopathy. Respiratory and cardiovascular examinations were unremarkable. Testicular examination revealed a nodule involving the right spermatic cord without inguinal lymphadenopathy.

Results: His complete blood count showed WBC 8900/ul (N-35%, E-22%, L-35%) with a blood picture evidence of moderate eosinophilia without any abnormal cells. USS scrotum showed mildly enlarged right testis, enlarged right epididymis, small right side hydrocele and a nodule involving right spermatic cord. He was subjected for a biopsy from the spermatic cord nodule and the histology revealed fibroconnective tissue with areas of caseous necrosis. Tissue sample was positive for gene X-pert test. A diagnosis TB involving the spermatic cord was made. CXR showed focal bronchiectasis and sputum screening with AFB and gene X-pert was negative. Serum b-HCG, a-feto protein and LDH were normal. He was started on anti TB treatment and nodule resolved.

Conclusion: Tuberculosis involving the spermatic cord is an extremely rare phenomenon. Histology plays a vital role in diagnosis and excluding fatal differentials.

**P6-11 | Higher bacterial load in drug resistant tuberculosis leads to unfavourable treatment outcome**

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Background and Aims: Acid-fast bacilli (AFB) grading in sputum examination is an important component to start and treatment outcome monitoring in drug resistant tuberculosis (DR-TB). The higher number of bacterial load at the beginning of treatment is a predictor of the emergence of an unfavourable outcome. This study aims to identify the high bacterial load at the beginning of treatment on the unfavourable treatment outcome.

Methods: This prospective cohort study conducted from August 2019 - January 2021 at Persahabatan Hospital, Indonesia included DR TB patients who received the short term regimen treatment. Sputum samples were taken from multidrug resistant (MDR) TB patients before the treatment. Sputum smear examination was done using Ziehl-Neelsen staining and gradation was measured according to International Union Against Tuberculosis and Lung Disease (IUALTD) criteria. The unfavourable treatment outcome such as died, treatment failure, lost to follow up and transfer out were monitored during the treatment.

Results: Fifty DR-TB patients were included in the study with median age 37,5 (19 - 69) years old, male dominants (60%) and 30 patients (60%) had unfavourable outcomes. The unfavourable outcome seen in higher bacterial load. Of the 71,4% unfavourable outcome had smear microscopy grade >2+, 57,1% unfavourable outcome had smear microscopy grade scanty/1+, and 59,1% smear negative had unfavourable outcome.

Conclusion: A higher sputum bacterial load is associated with poorer MDR TB outcome.

**P6-12 | The cruel dual; SARS-CoV-2 and tuberculosis co-infection, the Sri Lankan experience**

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Background and Aims: Tuberculosis, the ancient infection of the lung should not be overlooked while the global health care systems struggle to control the Severe Acute...
Respiratory Syndrome Corona Virus 2 (SARS-COV-2) infection i.e., COVID-19. Tuberculosis, SARS-COV-2 co-infection, causing double burden to the lung is an emerging syndemic. This survey assessed the characteristics, progression and outcome of co-infected patients.

**Methods**: Data were gathered from the records of the patients, admitted to the National Hospital for Respiratory Disease (NHRD) Sri Lanka, the only center in the country managing co-infected patients from December, 2020 to May, 2020.

**Results and Conclusion**: There were 65 patients (Male-48: Female-17) with a median age of 55 years, who were co-infected. The majority (56.9%) had smear-positive pulmonary-tuberculosis. Among extrapulmonary tuberculosis patients had various organ involvements noted including renal and nervous system. 80% of patients were newly diagnosed tuberculosis patients while 20% had reactivation or reactivation with one Multi Drug Resistant tuberculosis patient. Chest X-Ray features of COVID-19 pneumonia were evident in 12.3% of the cases. 10.7% were hypoxemic on admission. During the course of illness, 27.6% required supplementary oxygen and 4.6% patients needed non-invasive ventilatory support. 41.5% needed anticoagulation during hospital stay. Dexamethasone or prednisolone needed in 32.3% of cases. Tocilizumab was not given to any patient.

There were 11 (16.9%) deaths due to severe pneumonia, a higher mortality than either infection alone. Our findings reiterate the importance of paying due attention to this emerging syndemic.

**P6-13 Clinical impact of low body mass index in patients with Mycobacterium avium complex pulmonary disease**

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**Background and Aims**: A low body mass index (BMI) has been reported to be a poor prognostic factor for Mycobacterium avium complex pulmonary disease (MAC-PD). The purpose of this study was to clarify the clinical features of MAC-PD in cases with a low BMI.

**Methods**: This retrospective study analyzed the data of patients diagnosed with MAC-PD at Saga University Hospital between 2008 and 2019. The analyzed patient characteristics included age, gender, BMI, symptoms, laboratory data, chest computed tomography findings, and the treatment courses. We also investigated factors associated with successful treatment.

**Results**: In total, 144 patients were included in this study. The low-BMI group (BMI < 18.5 kg/m²) had a higher incidence of sputum, M. intracellulare infection, and cavitory lesions (35.5% vs. 20.7%, p < 0.05), in addition to lower blood lymphocyte counts, higher neutrophil-lymphocyte ratios, and a lower prognostic nutritional index (PNI) when compared to the preserved-BMI group (BMI ≥ 18.5 kg/m²). Sixty-six of the 144 patients (45.8%) received treatments. Hemopstumee, acid-fast bacillus sputum smear positivity, low lymphocyte counts, a low PNI (60.6% vs. 33.3%, p < 0.05), and unsuccessful treatment (48.5% vs. 24.2%, p < 0.05) were found to be associated with a low BMI.

**Conclusions**: A low BMI is associated with cavitory lesions, malnutrition, and unsuccessful treatment in MAC-PD.

**P6-14 Impact of nationwide lockdown due to COVID 19 on incidence of sputum positive pulmonary tuberculosis in rural India**

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**Background and Aim**: In the absence of definite pharmacetical interventions, many countries including India resorted to population-wide lockdowns to slow the spread of the SARS CoV 2 virus and to allow their health systems to cope. These lockdowns had an important effect on SARS-CoV-2 transmission. During a lockdown, movement restrictions affected those experiencing TB symptoms to seek medical care. Aim of this study was to compare the incidence of pulmonary tuberculosis in pre and post lockdown period.

**Materials and Methods**: We compared the number of sputum samples tested and number of sputum positive pulmonary tuberculosis in pre and post lockdown period. All consecutive 992 sputum specimens of adults greater than 15 years of age that presented to the Sparsh rural hospital in between September 2019 and March 2020 (Pre lockdown) and 510 sputum specimens received between April 2020 to September 2020 (Post lockdown) were subjected to ZN staining for Mycobacterium tuberculosis. Data was analysed by using Microsoft excel.

**Results**: Compared to pre lockdown (992) there was 48.4% reduction in number of sputum specimens received in post lockdown (510). Number of sputum positive pulmonary tuberculosis cases in post lockdown (14) were 47.7% less compared to pre lockdown (25).

**Conclusions**: In the weeks following the imposition of a nationwide lockdown on March 24, 2020, India reported significant drop in daily notifications of TB relative to average pre-lockdown levels. The lockdown in response to the pandemic resulted in an adverse epidemiologic impact on TB incidence through its effect on access to health care, poverty and dietary intakes.