aspergillus. Galactomannan assay was positive. Thyroid profile was normal. Sputum for fungal stain also yielded hyphae of filamentous fungi. He was started on oral voriconazole and was serially monitored with USG neck and galactomannan assay.

**Results:** Fungal infections of the thyroid are extremely uncommon. A rich blood and lymphatic supply, well developed capsule and high iodine content of the gland are various mechanism of resistance to infection.

Most of thyroid lesions of invasive Aspergillosis are described as focal abscesses, patchy haemorrhagic lesions due to vascular invasion or diffuse necrotizing thyroiditis. In patients with thyroid Aspergillosis, focal inflammation and direct tissue destruction caused by fungi can cause thyroid hormones to leak into the bloodstream, sometimes leading to thyrotoxicosis. Though in our case patient had normal thyroid profile and he was asymptomatic apart from hoarseness of voice. The galactomannan assay which detects galactomannan antigen, which is component of Aspergillus cell wall, can detect aspergillus before symptoms appear, but sensitivity and specificity in solid organ transplant patients are lower than in hematological patients.

Though surgical options can be tried whenever the lesion is accessible like in this case but voriconazole is the most effective drug for disseminated and invasive Aspergillosis. It inhibits the activity of cytochrome P450-3A4; that’s why the tacrolimus dose should be reduced to prevent nephrotoxicity.

**Conclusions:** Due to various innate resistance mechanism, fungal infections of the thyroid are extremely uncommon. Aspergillosis in our case presented as change in voice. It was diagnosed by FNAC of nodular lesion of thyroid gland. Though surgical excision can be tried but as in this case, it can be treated with voriconazole with serial galactomannan and ultrasonographic monitoring.

No conflict of interest

**POS-182**

**SEROLOGIC AND URINARY CHARACTERISTICS OF LABORATORY-CONFIRMED GENITOURINARY TUBERCULOSIS AT A TERTIARY HOSPITAL IN THE PHILIPPINES**

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**Introduction:** Genitourinary tuberculosis (GUTB) is an insidious yet potentially fatal disease. Despite the high TB burden in the Philippines, local data on GUTB are few and dated. The study aimed to determine the serologic and urinary profile of patients with GUTB seen at a tertiary government hospital in the Philippines from January 2009 to March 2020.

**Methods:** All patients with laboratory-confirmed (AFB smear-positive, PCR-positive, culture-confirmed, or histologically-confirmed) GUTB were included in this retrospective study. Demographic data, clinical characteristics, laboratory and radiologic findings, and histopathology reports were recorded.

**Results:** Our research is the largest GUTB study in the country to date. Among the 131 charts reviewed, 52.7% had positivity in urine AFB smear, 13.3% in urine MTB PCR, 13.3% in urine MTB culture, and 16.8% in histopathology. Bladder (54.5%) and kidney (36.4%) were the most affected organs among those with histopathologic evidence of infection. The sex ratio was 1:1.22 (male:female), and the mean age was 36.1 ± 18.4 years (range, 1–82 years). Weakness (11.5%) was the most common chief complaint, whereas slough (8.4%) and abdominal pain (8.4%) were also common. Of those with laboratory data, a majority presented with anemia (81.5%), while several had leukocytosis (43.8%) and thrombocytosis (24.6%). Hypoalbuminemia (59%), impairment of renal function (36.2%), and electrolyte abnormalities such as hyponatremia (49.2%), hypercalcaemia (21.5%), and hypokalemia (19.5%) were common. Proteinuria (66.9%) and pyuria (62.8%) were the most frequent abnormal findings, followed by hematuria (48.8%), acidic urine (47.1%), and low specific gravity (33.1%). Imaging findings showed combinations of renal parenchymal disease with or without signs of chronicity: non-functioning kidney; pyelitis, pyelonephritis, or pyonephrosis; renal or bladder wall masses; urinary tract calcification, dilatation, or thickening; urinary bladder wall thickening; fistulous tract formation; and evidence of extra-renal TB.

**Conclusions:** GUTB remains an important medical condition in the Philippines. The young age at presentation with severe clinical, laboratory, and radiologic manifestations seen in our study may reflect local epidemiology as TB continues to be widespread in our country. Apart from the more commonly cited abnormalities in literature, multiple electrolyte imbalances and urinary concentration defects were also observed in many cases, possibly indicating tubulointerstitial involvement. Accordingly, while diagnosis is nonuniform and challenging in low-resource settings, we recommend the inclusion of routine serum and urine biochemical studies as part of work-up of severe cases to possibly help with the management of GUTB.

No conflict of interest

**POSTER SESSION: KIDNEY IN PREGNANCY AND POST-PARTUM**

POSO7

15/04/2021

Poster Area

05:00 – 06:00

**POS-183**

**NEPHROCHECK AKI RISK SCORES IN PREGNANT AND NON-PREGNANT HEALTHY WOMEN**

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**Introduction:** Pregnancy associated Acute Kidney Injury (Pr-AKI) is associated with increased morbidity and mortality for mother and baby. In addition, recent evidence suggests that even after complete recovery from previous AKI events, future pregnancies may be adversely affected.

However, due to dynamic and substantial changes with gestation in serum creatinine concentration, diagnosis and prediction of Pr-AKI is challenging. Diagnostic criteria for AKI in non-pregnant patients do not appear to be generalisable. A promising AKI predictor in non-pregnant patients, is the ‘NephroCheck’ point-of-care AKI Risk Score, derived from a ratio of two urinary G1 cell cycle arrest markers: Tissue Inhibitor of Metalloproteinase-2 (TIMP-2) and Insulin-like Growth Factor Binding Protein-7 (IGFBP-7), which is elevated prior to serum creatinine. Numerous studies have demonstrated an incremental risk of AKI Stages 2 and 3 with AKI Risk Score >0.3 and 2.0 ng/ml²/10⁴ respectively.

‘NephroCheck’ could facilitate early midwifery-led diagnosis, Pr-AKI prediction and prevention strategies, but AKI Risk Scores have not been investigated in pregnancy and may be influenced by gestational physiological adaptation even in those without AKI.

**Aim:** To compare AKI Risk Scores in pregnant and non-pregnant healthy women without AKI

**Methods:** Mid-stream urine samples, provided by healthy pregnant women without complications (including Pr-AKI, hypertension, renal disease and other known causes and risk-factors of Pr-AKI) and non-pregnant controls recruited to Pre-Eclampsia, Chronic Hypertension, rEnal and SLE (PEACHES) study, were processed using the ‘NephroCheck’ point-of-care testing device according to manufacturer’s instructions. Urinary AKI Risk Scores (TIMP-2/IGFBP-7) were compared between pregnant and non-pregnant women.

**Results:** Urine samples from 20 pregnant (Median gestation 35.8 weeks [range 31.4 – 35.6]) and 20 non-pregnant were analysed. Median AKI Risk Score in pregnant women tended to be higher than non-pregnant women but was not significantly different (0.28 [range 0.07-1.14] v 0.17 [range 0.03-1.99] ng/ml²/10⁴ (p=0.16)). Half (10/20; 50%) of pregnant women without complications had a higher Risk Score in pregnancy than in non-pregnancy.

**Risk Score in pregnant women tended to be higher than non-pregnant women but was not significantly different.**