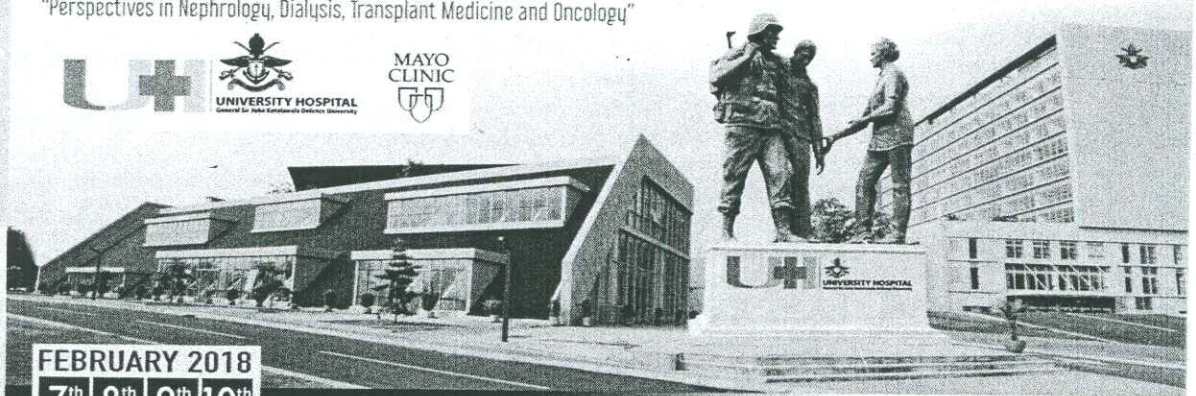




KDU - Mayo Clinic International Nephrology, Dialysis, Transplant Medicine and Oncology Conference

"Perspectives in Nephrology, Dialysis, Transplant Medicine and Oncology"



FEBRUARY 2018
7th 8th 9th 10th



February
7th to 10th
2018
Colombo,
Sri Lanka

Perspectives in Nephrology, Dialysis, Transplant Medicine and Oncology

UHKDU, Colombo Sri Lanka

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Ministry of Health, Nutrition & Indigenous Medicine



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measures, screening methods, mode of spread, management and treatment methods were significantly better among teachers who had a relative with breast cancer. The television and radio were the leading sources of information (86.4%).

Overall awareness of breast cancer is satisfactory in the study population. Therefore, it is needed to provide periodic intervention programs targeting teachers for further improvement.

Key words: Breast cancer, female school teachers, awareness, government schools

Abstract 9

Absolute quantification method to detect bacterial load in leptospirosis: EvaGreen® chemistry based Quantitative PCR assay

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This study aimed to optimize and establish EvaGreen® chemistry based quantitative real time PCR (qPCR) assay to quantify leptospiral loads in clinical specimens.

Five-day old *Leptospira interrogans* serovar Manilae cultivated in liquid Ellinghausen-McCullough-Johnson-Harris (EMJH) medium was quantified using UV spectrophotometer (UVD-3200) at 420nm. The obtained optical density (OD) was used to calculate the number of *Leptospira* organism using a standard curve. Bacterial suspensions were spiked into whole blood collected from a healthy volunteer with no history of leptospirosis to obtain final concentrations ranged between 10⁶ to 10³ *Leptospira*/ml. DNA was extracted from spiked blood using QIAamp DNA blood mini kit. Optimization of qPCR was carried out for the annealing temperature, primer and template DNA concentration using BioRad qPCR machine. The secY qPCR assay was carried out in triplicate to generate standard curve.

The five-day old *Leptospira* culture resulted in OD of 0.352 corresponding to 12.5×10⁸ bacteria/1 ml. The optimized conditions for the qPCR as follows: annealing temperature-54°C, primer concentrations-200 nM and template DNA-10 µl (~200 ng). Established standard curve had an efficiency of 105% which was equivalent to a slope of -3.21. An efficient qPCR reaction should have an efficiency between 90% and 110%, which corresponds to a slope between -3.58 and -3.10 indicating the success of the qPCR.

The qPCR assay, based on EvaGreen® technology was found to be efficient and can be applied to determine the bacterial load in patients with leptospirosis.

Abstract 10

Rapid Deterioration of Renal Function leading to chronic kidney disease due to Coexistence of Intratubular Amyloidosis and Myeloma Cast Nephropathy

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A 46 year old previously healthy patient presented with fatigue, vomiting and loss of appetite of two weeks duration. He was referred to our institution for initiation of urgent hemodialysis when his preliminary investigations showed a very high serum creatinine of 2200µmol/l. Physical examination was unremarkable other than mild pitting bilateral ankle oedema.

Investigations revealed high serum creatinine with moderate anaemia and subnephrotic range proteinuria. Ultrasound scan revealed normal sized kidneys with normal echogenicity and CM demarcation. Serum protein electrophoresis did not reveal a monoclonal gammopathy, but urine protein electrophoresis revealed a monoclonal band in the beta region. Urine immunofixation identified abnormal monoclonal band consisting of Lambda chains. Serum free light chain assay revealed free kappa chain concentration of 132.7mg/L and free lambda chain concentration of 2519mg/L with a kappa/lambda ratio of 0.05 (0.26-1.65).

Bone marrow did not show evidence of plasma cell proliferation.

Renal biopsy revealed coexistence of intratubular amyloid and light chain casts within renal tubular lumens in the absence of glomerular or vascular amyloid depositions and the amyloid deposition was confined to the kidney with no evidence of extra renal involvement.