Early urological management for patients attended nurse clinic for microscopic haematuria

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Introduction
Microscopic haematuria (MH) is not uncommon reason for referral to urology. Urine sediment after centrifuge normally contains 2 to 3 RBCs per HPF on microscopic examination. There is consensus that ? 3 RBC/HPF in 2 of 3 urine specimens signals MH which can be symptomatic or asymptomatic. Although MH less commonly associated with malignancy than gross haematuria, it may signal cancer. Patients presented with asymptomatic MH usually have to wait for at least one year before they have the first urological consultation in majority of public hospitals in Hong Kong.

Objectives
By setting up a urology nurse microscopic haematuria (MH) clinic, patients no matter they have symptomatic or asymptomatic, MH could be assessed and investigated within 4 weeks. It can help to pick up the high risk patients for early urological management.

Methodology
Patients presented with symptomatic or asymptomatic microscopic haematuria (MH) during the period of Jan 2015 to Dec 2016 are recruited for the assessment and investigation according to the management protocol including the detailed history taking, blood for renal function, glomerular filtration rate, urate and bone profile, mid-stream urine for culture, X-ray for KUB and ultrasound of urinary system. All investigation results once available would be discussed with urologist for the management plan. Patients are required to attend the MH clinic for the notification of all investigation findings and discussion of management plan

Result
271 patients attended the microscopic haematuria (MH) clinic during the period of Jan 2015 to Dec 2016. All of the patients were assessed by the urology specialty nurse 2-4 weeks from the date of referral. 128 (47.2%) females and 143 (52.8%) males. 78 (28.8%) patients presented asymptomatic MH whereas 193 (71.2%) patients
presented with loin pain and MH. The mean age of the patients was 52.9 +/- 12.9. 150 (55.4%) patients had normal findings of laboratory and radiological investigations. However, 96 (35.4%) patients had incidental finding of urinary tract stones in which 70 (72.9%) patients required endoscopic stones removal such as ureterorenoscopic lithotripsy or percutaneous nephrolithotomy. In addition, 15 (5.5%) patients had incidental finding of renal cysts and 5 (1.8%) patients had liver cysts. Furthermore, 2 (0.7%) patients had incidental finding of pancreatic lesion on CAT scan and required further investigation by hepatobiliary pancreatic colleagues. There was 1 patient newly diagnosed of localized prostate cancer and 1 patient had inguinal hernia with robotic prostatectomy and hernia repair done respectively. Therefore, by setting up a MH clinic, urology nurse can help to pick up the high risk patients of newly diagnose of urothelial cancers that require urgent urological management. And, it can minimize the chance of patients attending the AED due to colicky pain causing by the stone passage.