STANDARD TREATMENT WORKFLOW (STW)

Gross Haematuria

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Standard Treatment Workflow (STW) for the Management of GROSS HAEMATURIA

PERFORM THOROUGH CLINICAL EVALUATION

SYMPTOMS

• Blood in urine - red coloured or dark coloured
• May be associated with pain:
  • Pain during voiding (urethra)
  • Pain in suprapubic region (bladder)
  • Pain in flank (kidney)
• Acute retention of urine due to clots
• Haematuria associated with clots (severe)

EXAMINATION
• Pulse, blood pressure
• Check for pallor
• Check for anasarca
• Per abdomen examination: Palpable bladder, flank mass
• Digital rectal examination: Enlarged prostate, hard nodular/ smooth surfaced prostate
• Rule out vaginal causes of bleeding
Standard Treatment Workflow (STW) for the Management of 
GROSS HAEMATURIA

ICD-10-B91.0

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MAKE A CLINICAL DIAGNOSIS: IS HAEMATURIA

INITIAL
- Haematuria
- Proteinuria
- Foul smelling urine
- Frequency, urgency
- Palpable vessels
- Weak or poor urinary stream
- Petechiae, purpura
- Cystoscopic abnormality
- Evidence of recent infection

TOTAL
- Hematological abnormalities
- Kidney, stone, malignancy
- Bladder, stone, malignancy
- Bladder, infection, genitourinary tuberculosis
- Stone, malignancy

TERMINAL
- Bladder stone, tumour at bladder neck
- Prostate, inflammation, benign
- Hyperplasia, malignancy

HOW TO INVESTIGATE

ESSENTIAL
- Urine examination: routine microscopy
- Hemoglobin estimation
- Kidney function tests (KFT)
- Ultrasonography of kidney urinary bladder and prostate region
- Urine culture

RECOMMENDED
- Contrast enhanced computed tomography of kidney urinary bladder region (intravenous pyelography if KFT normal)
- Magnetic resonance imaging of urinary bladder (MRU if KFT abnormal)
- Cystoscopy if <40 years or smoker

OPTIONAL
- Urine culture
- Urine for active sediment (NSG/ nephrotic syndrome suspected
- PT/INR (if bleeding disorder suspected)
- Serum protein, specific antigen (if nephritis suspected
- Urine for acid fast bacilli (IFP): 3 smears if tuberculosis suspected

HOW TO TREAT

GENERAL
- Start intravenous fluids as required (primary level)
- If Anaeemia: transfuse blood as required (primary level)
- Manage: cast/catheter 
- Start diaphoretic/analgesics (primary level)
- If Acute urinary retention catheterisation with 20/24Hr 5 way cathay and may start continuous irrigation with normal saline (primary level)
- Cystoscopic spatula extraction may be performed if feasible (tertiary level)
- If basic evaluation and management facilities are unavailable refer to tertiary level

SPECIFIC
- Haematuria should be considered as a symptom of genitourinary malignancy in patients >40 years old until proven otherwise
- Suspected nephrotic/nephritic/syndrome: cola coloured urine, proteinuria, anorexia, hypertension: Refer to nephrologist (tertiary level)
- Suspect urinary tract infection: presents with dysuria, increased frequency of voiding and other infections lower urinary tract symptoms with/without fever: treat with broad spectrum oral antibiotics (primary level)

DIFFERENTIAL DIAGNOSIS FOR CHRONIC CONDITIONS LEADING TO HAEMATURIA

<table>
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REFERENCES

1. Standard treatment guidelines in urology Ministry of Health and Family Welfare

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on their specific condition as decided by the healthcare provider.

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