

Audit on management of UTI and follow up in paediatric A&E

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Introduction or background: 3-month-old was treated with sepsis to suspected UTI, seen in paediatric clinic with follow up investigation, DMSA and USS completed; MCUG was missed and lost to follow up. He presented multiple times to ED with dysuria and suspected UTI. On the last presentation at 7-year-old he was admitted due to pyelonephritis and evidence of chronic kidney disease with significant scarring to both kidneys.

This audit was designed to monitor and improve:

- Compliance with 1st line Antibiotics used in the treatment of UTI.
- Follow up pathway according to hospital guidelines in Paediatric Emergency using EPIC (the electronic patient system)

Method: Collected and analysed data for a period of 6-month total of 79 patient including:

- Patients attending to ED up to 18 years of age who had urine sent for culture and sensitivity.
- Patients less than 3 month meeting the threshold for sepsis screen.

Results:

- Total of 79 patients.
- 11% of these patients had recurrent UTI.
- Compliance with UTI guidelines 85%.
- Reasons for non-compliance were thought to be:
 - Changes made to the guidelines by using nitrofurantoin instead of trimethoprim as first line treatment.
 - Confusion between upper and lower UTI signs and symptoms.
 - Lack of awareness about UTI guidelines as some doctors don't work on regular basis in the paediatric emergency.
- Compliance with UTI follows up pathway 85%.

Interventions:

- ED team to check the chase list on EPIC early morning for urine culture results and document the action taken clearly with the proper follow up.
- All patients with positive urine cultures/ recurrent UTI/ Atypical UTI warrants discussion with paediatric senior for proper follow up and arranging required imaging.
- Flagging positive urine culture or recurrent UTI in the system - communication with IT-team is in progress.
- Adding UTI to the problem list in EPIC when the urine culture come back positive, so it will be known if the patient represents with a UTI.
- Easy access to trust UTI guidelines through EPIC.
- Bite size teaching for UTI.

Biography

Youanna Mikhail and Shaza Gaafar are esteemed healthcare professionals affiliated with King's College Hospital, London, United Kingdom. With a shared commitment to clinical excellence and research-driven practice, both have contributed significantly to advancing patient care within their respective specialties. Actively involved in academic and professional forums, they continue to drive meaningful improvements in clinical outcomes while mentoring future practitioners.

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