Diagnosis and Management of UTI in Febrile Infants and Young Children

1. Infant 2-24 mo with fever >38°C

2. Is patient judged to require immediate antimicrobial therapy?
   - No
   - Yes

4. Is likelihood of UTI <1%?
   - Yes
     - Option
     - 6. Obtain urine for urinalysis only by catheter or SPA or bag.
       - 7. Conduct enhanced urinalysis with microscope and counting chamber.
       - 8. Conduct dipstick urinalysis; considered positive if LE and/or nitrite is positive.
       - 9. Urinalysis positive?
         - No
         - Stop
         - 15. Follow clinical course, reevaluate if fever persists.
         - Yes
         - 10. Culture urine obtained by catheterization or SPA.
         - 11. Treat with antimicrobials effective against common uropathogens according to local sensitivity patterns; oral or parenteral.
         - 12. Urinalysis and culture positive?
           - No
           - Stop
           - 14. Obtain RBUS any time after UTI is confirmed.
           - Yes
           - 13. Adjust antimicrobial therapy according to sensitivities. Treat 7-14 d.

4. Is likelihood of UTI <1%?
   - No
     - 3. Obtain urine by catheterization or SPA.
     - 5. Perform urinalysis.

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7. Conduct enhanced urinalysis with microscope and counting chamber.

8. Conduct dipstick urinalysis; considered positive if LE and/or nitrite is positive.

9. Urinalysis positive?

10. Culture urine obtained by catheterization or SPA.

11. Treat with antimicrobials effective against common uropathogens according to local sensitivity patterns; oral or parenteral.

12. Urinalysis and culture positive?

13. Adjust antimicrobial therapy according to sensitivities. Treat 7-14 d.

14. Obtain RBUS any time after UTI is confirmed.

15. Follow clinical course, reevaluate if fever persists.


17. Second or higher proven UTI or VCUG indicated by RBUS?

18. Obtain VCUG to evaluate for grade IV-V VUR.

19. Instruct family to seek medical care for future fevers to ensure timely treatment of UTI.

20. Urologic management as indicated by imaging.