

Arthritis

(Inflammation of the joint space secondary to infection.)

Affected organ	Single joint that results in suppurative inflammation.
Symptoms	Pain, swelling and limitation of movement.
Most common	Hematogenous seeding of joint.
Types	<p>1. Gonococcal infection:</p> <ul style="list-style-type: none"> • Most common cause in young patients & sexually active adults by transmitting Neisseria gonorrhoea “in sexually active adults”. • It is secondary infection due to cervicitis “in women” & urethritis “in men”. • It is present with polyarthralgia, tenosynovitis, fever, skin lesions. • If it’s not treated it will lead to suppurative monoarthritis. <p>2. Nongonococcal infection:</p> <ul style="list-style-type: none"> • Occurs in older patients. • It results from introduction of organisms into joint space as a result of bacteremia or fungemia.
Caused by	<ul style="list-style-type: none"> • Direct trauma, procedures (arthroscopy) or from contiguous soft tissue infection. • S.aureus (most common cause). • Other organisms: streptococci and aerobic Gram negative bacilli. • Lyme disease in endemic areas (Uncommon in KSA). • In sickle cell disease patients, arthritis may be caused by Salmonella species. • Chronic arthritis may be due to MTB or fungi.
Diagnosis	<ul style="list-style-type: none"> • History/examination to exclude systemic illness. • Arthrocentesis: <ol style="list-style-type: none"> 1-Synovial fluid is cloudy and purulent. 2- Leukocyte count is high. 3- Gram stain and culture are positive in most cases. 4-Exclude crystal deposition arthritis or noninfectious inflammatory arthritis. • Blood cultures indicated. • If gonococcal infection suspected, take specimen from cervix, urethra, rectum & pharynx for culture or DNA testing for N.gonorrhoeae.

Treatment

- Arthrocentesis with drainage of infected synovial fluid.
 - Occasionally arthroscopic or surgical drainage.
 - Antimicrobial therapy:
 - Gonococcal arthritis: IV Ceftriaxone oral Qinolone or Cefixime for 7-10 days.
 - Nongonococcal arthritis:
 - MSSA: Cloxacillin or Cefazolin
 - MRSA: Vancomycin
 - Streptococci: Penicillin or Ceftriaxone or Cefazolin
 - Enterobacteriaceae: Ceftriaxone or Fluroquinolone.
 - Pseudomonas: Piperacillin & Aminoglycoside
 - Animal Bite: Ampicillin-Sulbactam
 - Lyme disease arthritis: Doxycycline for 1 month
-