

RHEUMATIC FEVER

Def: multi system inflammatory disease occurs following pharyngeal infection with group A β -hemolytic streptococci "Streptococcus pyogenes"

usually affect children 5-10 y

mech: Cross reactivity - Antigenic Mimicry

Jones Criteria

- | | |
|--------------------------|-------------------------------|
| Major | Minor |
| - migratory polyarthrits | - arthralgia |
| - Carditis | - fever |
| - subcutaneous nodules | - $\uparrow\uparrow$ ESR, CRP |
| - erythema marginatum | - $\uparrow\uparrow$ TLC |
| - Sydenham chorea | - $\uparrow\uparrow$ WBC |
| | - long PR interval |

Diagnosis 2 major, 1 major + 2 minor evidence of streptococcal Infection :-

- * ASO titers > 250 u
- * Blood agar \rightarrow β hemolysis
- * Kits :- use enzymatic or chemical methods to extract the antigen from swab then use EIA or agglutination test
- ECG \rightarrow Cardiac complications

ttt: * long acting penicillin

Symptomatic ttt :- digitalis \rightarrow Heart Failure
Steroids + Salicylates \rightarrow \downarrow Pain - inflammation
Haloperidol \rightarrow Sydenham chorea

Prophylaxis "Prevention"

detection and early antimicrobial therapy of throat infection before day 8 can effectively prevent ARF, this require maintainance of benzathine Penicilin G IM for 10 days
 \rightarrow Erythromycin : alternative drug



فلسطين

BACTERIAL ENDOCARDITIS

DEF: inflammation of the lining of heart and heart valves, called endocardium

Causative Organisms:
Staph. aureus * strept. viridans * fungus
* enterococci * Pseudomonas aeruginosa

Types

1) **Acute bacterial endocarditis ABE**

- \rightarrow Staph aureus gram + cocci clusters
- \rightarrow affect normal heart valves
- \rightarrow IV drug users at risk
- \rightarrow mortality rate 50% "Serious"

2) **Sub acute bacterial endocarditis SBE**

- \rightarrow Strept viridans gram +ve cocci chains
- \rightarrow affect abnormal or damaged or prosthetic valves
- \rightarrow reach blood by trauma - tooth extraction - tonsillectomy

Clinical Presentation :-

- fever - chills - night sweats
- systemic emboli - Janeway lesion -
- osler nodes - splinter hemorrhage -
- Roth spots - pleuritic chest pain

Diagnosis Blood culture technique

- alpha hemolysis \rightarrow Zone of greenish discolor - strept viridans
- Beta hemolysis \rightarrow clear zone \rightarrow staph aureus
- 2) fever - valvular lesion \rightarrow ECG - valvular lesion

ttt: IV antibiotic

- ABE : gentamicin - nafcillin
- SBE : gentamicin - ampicillin \rightarrow native valve
- gentamicin - vancomycin - rifampin \rightarrow prosthetic valves