

NURS 821

Vascular and Cardiac Disorders

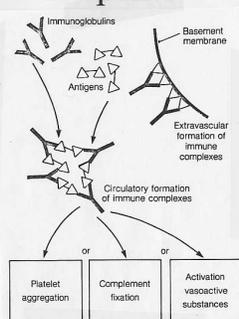
Inflammatory Heart Disorders

Lecture 6, Part 5

Rheumatic Endocarditis

- Etiology-3% develop Rheumatic fever secondary to Streptococcal sore throat
- Type III Hypersensitivity Response
- Manifestations
 - Carditis
 - Polyarthritis
 - Chorea
 - Erythema marginatum
 - Subcutaneous nodules

Type III Hypersensitivity Response



Scarlet Fever



FIG 5-7.
Bright red erythema and strawberry tongue in scarlet fever.

Erythema Marginatum in Rheumatic Fever



FIG 13-10.
Erythema marginatum. Ring-shaped erythema on face of infant with acute rheumatic fever.

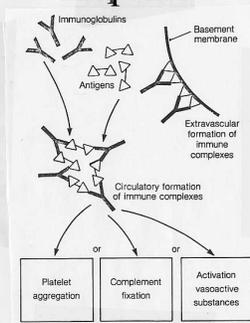
RHD

- Stages:
 - Acute
 - Initial infection affects connective tissue of heart, vessels, joints, subcutaneous tissues
 - Recurrent
 - Extension of cardiac manifestations
 - Chronic
 - Permanent deformity of valves, usually mitral
 - Happens 10+ years post-infection

Endocarditis

- Definition: Inflammation of heart's endothelial surface
- Classification
 - Acute-highly virulent like Staph; fulminant with valve destruction
 - Subacute (SBE)-less virulent, more insidious
 - Pre-existing valve abnormalities
 - Manifested by F, arthralgia, myalgia, skin manifestations

Type III Hypersensitivity Response



At Risk for IE

- Bacteremia
- Immunocompromised
- Complement deficient or organism complement resistant
- Damaged hearts
- IVDA
- Cardiac trauma

IE Manifestations

- Skin-Petechiae and splinter hemorrhages
 - Due to microembolization of vegetations
- Osler's nodes on finger pads due to infected emboli
- New onset murmur-acute mitral regurgitation

IE Complications

- Right heart
 - Pulmonary embolism or infarct
- Left heart
 - Infarction of:
 - Spleen
 - Kidney
 - Brain
 - Extremity
