

Interstitial Inflammation

INTERSTITIAL INFLAMMATION .HEART

-affected can be endocardium, myocardium (and pericardium) -two reasons: 1.) Rheumatic fever 2.) Infectious endocarditis

Rheumatic Fever Characteristics polyarthritis migrans erythema marginatum rheumatic knots under skin chorea minor: meningoencephalitis HEART DEFECT is the most serious late defect Morphology acute heart disease : PANICARDITIS pericarditis, serous or serofibrous myocarditis microscopic nodules within stroma along small veins, with fibrinoid necrosis in center of nodule and in periphery we see inflammation cells and neutrophilic granulocytes and some histiocytes later. The result is ASCHOFF Cells and ANITSCHKOV cells. —> Ashoff nodules. During its course these nodules will regress and become smaller with small scars. endocarditis mitral and aortic valves. edema and fibrinous growths GRANULATION onset is seen here! this is unspecific granulation tissue. chronic heart disease : VALVULAR fibrohyaline valve thickening, adhesions among commissures, „leaflet retraction“, calcifications, pathological vascularization (usually walls are avascular, but here we develop vessels) this leads to : insufficiency, stenosis, combined effect Diagnostic: take a fibrin clot and search for infectious agent!! Infectious Endocarditis Characteristics presence of thrombi with infectious agents on the endocardium, usually valvular bacteria or fungi requires penetration of infectious agents into the blood wedge?? FORMS Acute and subacute form usually affecting already damaged valves (congen. malformations, post rheumatic MOSTLY LEFT SIDE INVOLVED (90%) but in drug users, right side primarily Morphology: Macro: surface of endocarditis, mitral valve affected, fibrin and blood clot seen (look at pic) Micro: Search for infectious agent, we see accumulated granulocytes (pic.) MYOCARDIUM MYOCARDITIS - infrequent, younger individuals, idiopathic (giant cell, Fiedler) infectious mostly viral bacterial (Lyme disease related is common!) fungal parasitic (toxicoplasmosis)

BLOOD VESSELS ***next class about this Angiitis = general term including aortitis, arthritis, arteriolitis, vasculitis, phlebitis allergic vasculitis heterogenous, could have many different reasons, like SLE, RA, drug reactions, Henoch Schönlein purpura, Goodpasture morphology: fibrinoid necrosis of vessel walls, dusting, leukocytolastic changes polyarthritis nodosa disease which causes dilation of blood vessel wall aneurysms, multiple aneurysms in walls („rosary form“) various histological changes, mostly fibrinoid necrosis in blood vessel walls „Kawasaki children disease“ is very characteristic, mostly coronary vessels granulomatous inflammation most common is temporal arteritis (giant cells, thrombosis). Takayasu disease OTHER Bürger disease: Mostly veins of lower limbs involved, common in Smokers, can spread to neurovascular bundle luetic aortitis