

ACQUIRED CAUSES OF AV BLOCK - 2009

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- 1) **Idiopathic senescent AV block: Lev disease related to aging:** it is an acquired heart block due to idiopathic fibrosis and calcification of the electrical conduction system of the heart. Lev's disease is most commonly seen in the elderly, and is often described as senile degeneration of the conduction system.
- 2) **Coronary artery disease:** Imperative Cardiac Catheterization with coronariography.
- 3) **Postoperative or traumatic**
- 4) **AV node ablation**
- 5) **Irradiation of the chest**
- 6) **Infectious**
- 7) **Collagen vascular:** systemic lupus erythematosus, rheumatoid arthritis, scleroderma, dermatomyositis, ankylosing spondylitis, polyarteritis nodosa, Marfan syndrome.
- 8) **Infiltrative:** sarcoidosis, amyloidosis, hemochromatosis, lymphomatous or solid tumor.
- 9) **Neuromuscular:** myotonic muscular dystrophy, peroneal muscular atrophy, scapuloperoneal syndrome, limb-gird dystrophy.
- 10) **Drugs effects:** digoxin, beta blockers, calcium antagonist, amiodarone, procainamide, class IC agents (propafenone, encainide, flecainide) taxol.

MY THERAPY APPROACH PROPOSSAL

- 1) If there are clear ECG signs of ischemia, (in a senior man) we think that it is not necessary another non-invasive approach. Cardiac catheterization is first indicating, and if there are coronary significant lesions, I would consider stents or revascularization.
- 2) After this approach: EPS
- 3) Permanent pacing in acquired AV block class I
- 4) Recommendation for type II second degree AV block. Level of evidence B.(1)

TYPE AV BLOCK	PACING NECESSARY	PACING PROBABLY NECESSARY	PACING NOT NECESSARY
Third or Complete Heart Block (CHB)	Symptomatic congenital CHB Acquired symptomatic CHB Acquired asymptomatic CHB		
Second	Symptomatic type I Symptomatic type II	Asymptomatic, type II at intra-His or infra-His level Hemodynamically symptomatic due to loss AV synchrony	Asymptomatic, type I, at supra-His (AV nodal) level. An exception may be in the elderly with asymptomatic type I AV block.
First		Hemodynamically symptomatic due to effective loss of AV synchrony with markedly prolonged PR interval (e.g.>300ms)	Asymptomatic

1) Braunwald E, Zipes DP, Libby P, HEART DISEASE A TEXTBOOK OF CARDIOVASCULAR MEDICINE. 6th edition pp777. 2001.