Pacemaker implantation in the real life: the french national electra survey

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Background: The modalities of a pacemaker (PM) implantation are likely variable, in the absence of precise referentials on the whole procedure. The purpose of the survey is to know the French practice, analyse their factors of variation and compare these data with the recommendations published on this subject.

Method: A survey was sent by email to the French implanters in the 4th quarter of 2007. It included 33 questions concerning pre, per and post implantation time. The inquiry concerns the patient admittance, the preparation for the intervention, the operating technique, the post-operative management and the antithrombotic strategy. The most frequent attitude was asked through single choice questions with 5 to 7 items.

Results: 97 questionnaires (25%) were completed and returned. Implanters profile is: First line implanter since < 2 years 3%; 2-10 years: 22%; >10 years: 75%. Number of devices implanted in 2006 < 50: 16%; 50-100: 34%; >100: 50%. 98% of physicians are male.

1 • Admission time doesn’t depend of the type of intervention, primo-implantation or replacement in the non VKA patients (p = 0.18) and also in the VKA patients (p = 0.95). But there is a significative difference in the admission time between non VKA patients and VKA patients for AF (p = 0.014) or VKA patients for mechanical valve (p < 0.001).

2 • The antibioprophylaxis is common while the shaving time and fast duration are not homogeneous.

3 • The first line cephalic approach is preferred to subclavian access, 68% vs 30% (1 ponction 6%, 2 ponctions 24%), (percutaneous 29%, “open air” 61%). The pectoral pocket is deep 67% or superficial 27%, to the right 31%, to the left 32% or according to right or left handed patients (25%). The use of diathermy knife is systematic 49%, only in case of haemorrhagic procedure or never 22%. Suture and haemostasis techniques, postoperative transfert, immobilization and monitoring are different according to the centres.

Conclusion: In French implantation real life practice, management and operating techniques of patients referred for PM implantation are very variable according to the centres, underlining the interest of a task force on this topic.
Pacemaker implantation and Vitamine K Antagonist management
the french national electra survey

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Background: Vitamin K Antagonist in patients candidate for a pacemaker implantation or replacement is a challenge for physicians who have to deal with thrombotic and haemorrhagic risk. No specific guidelines are available.

Goal of the study: to assess the management of these patients in French real practice.

Method: A survey was send by email to the French implanters in the 4th quarter of 2007. It included 33 questions concerning pre, per and post implantation time. The most frequent attitude was asked through single choice questions with 5 to 7 items.

Results: 97 questionnaires (25% of the total sent) were completed and returned. Implanters profile is: First line implanter since < 2 years 3%; 2-10 years : 22%; >10 years : 75%. Number of devices implanted in 2006 < 50: 16%; 50-100: 34%; >100: 50 %.

1. Admission to intervention delay (AID): There is no significative difference of AID between primoimplantation and replacement both in the group of AF VKA indication (p = 0,95) and in the group of MMV VKA indication (p= 0,94).

2. Interruption of VKA and heparin prescription: There is a significative difference of strategy in AF and MMV group (p<0,001). Temporary interruption of VKA without substitution is 30% in AF group versus 2% in MMV group. Heparin substitution is 43% in AF group versus 77% in MMV group.

3. Day of restart of VKA when interrupted: VKA is restarted more often on the day of implantation in the MMV group versus AF group (55 vs 43%) but without significative difference.

Discussion:
Admission to intervention delay is homogeneous in case of VKA treatment for AF (same strategy for more than 75% of physicians) but not in case of MMV VKA indication. Primo implantation or replacement does not change the strategy for each indication. Strategy for interruption of VKA and heparin switch is strongly variable in AF and MMV VKA indication. Day of restart of VKA when interrupted is early for most of physicians in MMV group.

Conclusion:
In french implantation real life practice, VKA management is not homogeneous whether indication is AF or MMV. This underlines the interest of a task force on this topic.