

Gaps in the implementation of Guidelines for Cardiac Rhythm Management Devices in Russian Federation

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ВСЕРОССИЙСКОЕ НАУЧНОЕ ОБЩЕСТВО
СПЕЦИАЛИСТОВ ПО КЛИНИЧЕСКОЙ
ЭЛЕКТРОФИЗИОЛОГИИ, АРИТМОЛОГИИ
И КАРДИОСТИМУЛЯЦИИ (ВНОА)

КЛИНИЧЕСКИЕ РЕКОМЕНДАЦИИ

по проведению
электрофизиологических
исследований, катетерной абляции
и применению имплантируемых
антиаритмических устройств

МОСКВА
2009

- ACC/AHA/HRS 2008 Guidelines for Device-Based Therapy of Cardiac Rhythm Abnormalities was translated and adapted for using in Russian Federation in 2009.
- The main indications for implantation pacemakers, devices for cardiac resynchronization therapy and cardioverter-defibrillators in Russian Guidelines were the same as in ACC/AHA/HRS 2008 Guidelines.
- Unfortunately only new Russian Guidelines can't change any thing in practical arrhythmology.
- In 2009 the amount of primary implanted pacemakers was 20645 (only 145 for 1000000 inhabitants) and first times decreased by 3% in compare with the previous year.

The main problem in Russian arrhythmology is inadequate financing

- Financing is independent from the complexity of treatment
- Financing of centers or hospitals depends of the budget level (federal or municipal)
- The expensive equipment some times bay for hospitals, that can't use them
- Patients can't pay “extra” for the increasing the quality of treatment (“all or nothing”)

Financing is independent from the complexity of treatment

- Hospitals receive the same money for the implantation of VVI pacemaker or device for cardiac resynchronization therapy or cardioverter-defibrillator
- In this situation hospitals prefer to implant simple and cost-effective Russian-made devices with simple monopole leads without active fixation
- Some times after implantation of few cost-effective devices hospital can accumulate funds and implant the device for cardiac resynchronization therapy or cardioverter-defibrillator

For example in 2009 St-Petersburg hospital #26 implant:

- 95 AAI (AAIR) pacemakers
- 344 VVI (VVIR) pacemakers
- 86 DDD (DDDR) pacemakers
- 0 devices for cardiac resynchronization therapy
- 0 cardioverters-defibrillators

Why in this hospital 65,8% of patients needs VVI (VVIR) pacemakers?

Financing of centers or hospitals depends of the budget level (federal or municipal)

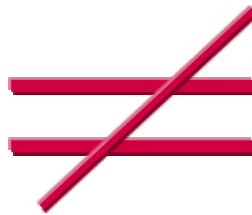
- Federal centers receive for each implantation or radio frequency ablation a little beat more than 3000 euro.
- Municipal hospitals receive for the same treatment of the same patients only 2000 euro.
- Price of pacemakers and leads in Russia higher (approximately near 30%), than in Europe in the result of state corruption.

Implantation of CRM devices in 2009 in St-Petersburg

	Municipal hospitals (n=4)	Federal centers (n=6)
DDD (DDDR)	200	540
VVI (VVIR)	668	317
AAI (AAIR)	164	50
CRT	4	48
ICD	4	72

Ratio VVI (VVIR) / DDD (DDDR)

- 3,34 in municipal hospitals
- 0,59 in federal centers
- relation is 5,69



Implantation of CRT and ICD devices in 2009 in St-Petersburg*

- 52 - CRT
- 76 - ICD



*For inhabitants of SPb, Leningrad area and NW region

Treatment of tachyarrhythmias in 2009 in St-Petersburg

	Municipal hospitals	Federal centers
AVRT	169	517
AT	13	68
AFlat	95	154
AFib	5	228
VT	20	174

Changes in financing of implantation of CRT and ICD devices in 2011

- From the beginning of 2011 special quotas for implantation of CRT and ICD devices must be correlate with real price of devices and leads
- Unfortunately we don't know how this quotas really working
- There are many another problems besides the financing in implantation of CRM devices

Another problems in implantation of CRM devises

- Education of cardiologists and general practitioners
- Politics of manufacturers of CRM devises
- Problems in follow up
- Opinion of patients

Education of cardiologists and general practitioners

- Cardiologists and general practitioners don't know indications for implantations of CRM devices
- After syncope or palpitations patients go to neurologist, produce EEG, Doppler, CT or MRI and can die without pacemaker
- Only in few centers in Russia is possible to produce tilt-test or implant Reveal for investigation the causes of syncope

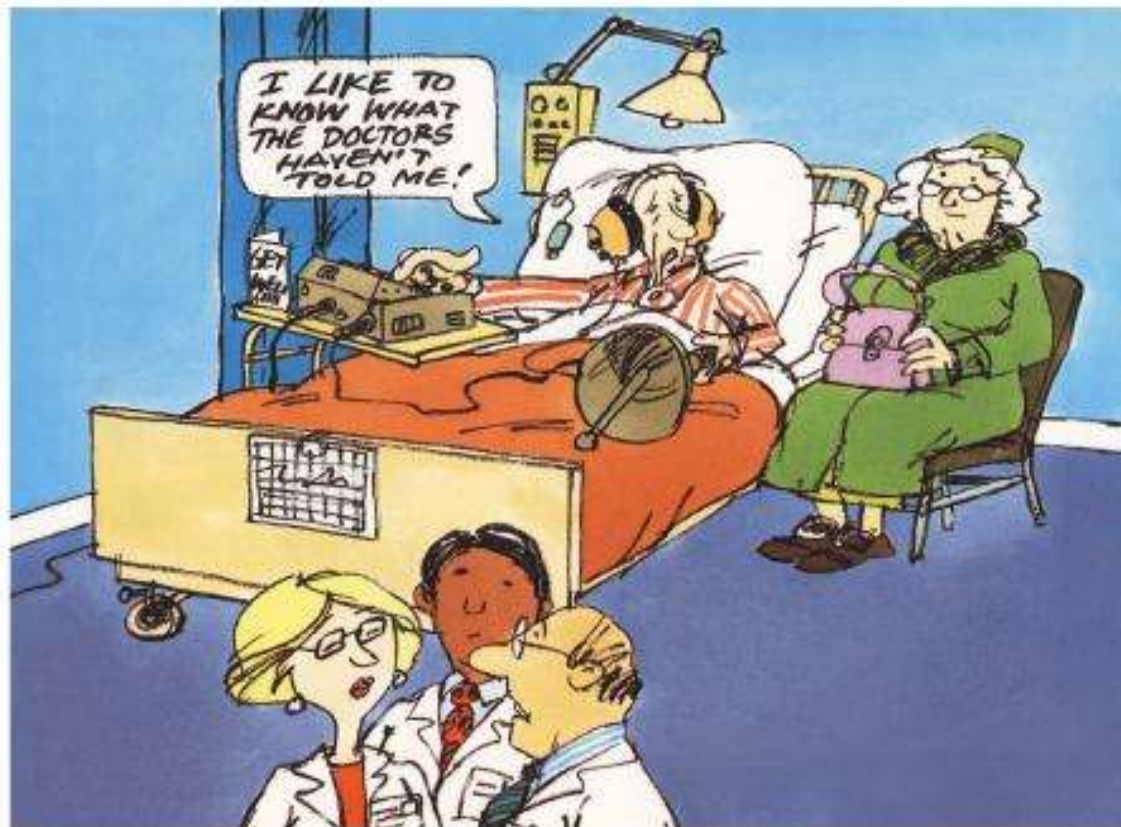
Politics of manufacturers of CRM devices

- During many years manufacturers of CRM devices contacts only with surgeons, that implant devices
- Last few years they begin to work with cardiologists
- Unfortunately most of patients that needs in implantation of CRM devices really treat with general practitioners, that have minimal knowledge in this field

Problems in follow up

- The most of CRM devices implant in big centers or regional hospitals and patients really live far from them
- Mostly surgeons, that implant devices have programmers, but they have no time for follow up patients
- Cardiologists haven't information from CRM devices, that needs them for follow up patients

Opinion of patients



- Most of patient think that CRM devices isn't so good for them and afraid of implantation

Conclusions

- It is necessary to optimize financing of implantation CRM devices
- We need in complex educational program in this field with orientation on cardiologists, general practitioners and patients
- It is necessary to reconstruct the system of follow up patients with CRM devices



Thank you for attention