

Physiological stimulation in Dx ICD implantation

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The change in the paradigm of artificial cardiac stimulation is a highly current topic, as we know that stimulation with a wide QRS and cardiac axis deviation can develop into Heart Failure, proportional to the stimulation time. This stimulation modality is well established in conventional pacemakers, and we, stimulators, continue to look for alternatives in the case of ICDs and non-responding resynchronizers. The case below is related to the implantation for primary prophylaxis, with the option being to implant an electrode for ventricular sense/pace in the deep septal region, seeking the most physiological stimulation possible (best QRS, narrower and with a more appropriate cardiac axis). Dx technology consists of a unique hybrid system that combines the advantages of single and dual-chamber ICD systems. Atrial sensing allows the SMART sensing algorithm to discriminate supraventricular tachycardias from ventricular rhythms, a unique feature previously available only on dual-chamber ICDs. Dx technology is superior to single-chamber technology in detecting high-frequency atrial episodes with a stable and reliable sample.