DEVICE THERAPY

Automatic remote home monitoring is a safe option for ICD follow-up

Patients with an implantable cardioverter-defibrillator (ICD) require follow-up to monitor their clinical status and device function. Remote home monitoring has the potential to reduce costs and workload while providing continuous ICD surveillance. In the TRUST study, the safety and utility of an automatic remote home monitoring system were compared with conventional follow-up for patients with an ICD. “The automatic home monitoring system ... detects potential events at the earliest possible stage and automatically informs the patient’s physician,” explains investigator Niraj Varma from the Cleveland Clinic, OH, USA.

A total of 1,339 patients with an ICD were randomly assigned 2:1 either to home monitoring or conventional care. Checks took place every 3 months after implantation for 15 months. Scheduled office visits and unscheduled evaluations, incidence of morbidity, and time elapsed

from first-event occurrence to evaluation were tracked for each group.

Home monitoring reduced in-hospital device evaluations by 45% without affecting morbidity at 12 months, and detected all clinical complications within 24 h. Although the short follow-up period does not enable most device and lead problems—which usually manifest several years post-implantation—to be assessed, these issues would be detected by the automatic remote monitoring system. “The [TRUST] study presents a device management model ... enabling prompt medical decisions ... and lays the foundations for pre-emptive care,” concludes Varma.

Helene Myrvang

Original article Varma, N. *et al.* Efficacy and safety of automatic remote monitoring for implantable cardioverter-defibrillator follow-up: the Lumos-T safely reduces routine office device follow-up (TRUST) trial. *Circulation* **122**, 325–332 (2010)