A 44-year old lady presented with Torsades de Pointes tachycardia secondary to congenital long QT. She was treated with dual chamber pacing and nadolol without recurrence. Twelve years later, the device showed end of life characteristics prompting an elective generator change. Following pulse generator explantation the ventricular lead efficiently paced the right ventricle. Atrial lead stimulation, however, also paced the right ventricle. There was no evidence of atrial lead displacement. Fig. 1 demonstrates synchronous atrial (upper trace) and ventricular (lower trace) sensing with similar electrocardiograms. Lead impedances were identical and in the normal range.
Radiographic imaging (Fig. 2) suggested fusion of the two leads (broken white arrows). A standard 6F pigtail catheter (Fig. 2, solid arrow) was introduced via the right femoral vein and used to ensnare the leads. Repeated gentle traction led to electrical separation of the leads and restoration of sequential AV pacing (Fig. 3). Lead impedances remained normal although insulation breaks must be present in both leads to allow conductor contact. To the best of our knowledge, this is the first time such a case has been reported. We presume it is due to chronic friction at the point of contact between the two silicone coated leads. An elective right sided implant of a new dual chamber system is planned.

Note for subscribers