A rare case of dislocation of ventricular electrode

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Introduction: A 70-year-old woman received dual chamber pacemaker due to sick sinus syndrome. She was routinely examined every year and the pacemaker worked normally. The pacemaker was malfunction in 2018's routine examination. The ventricular electrode parameters of both pacing threshold and sense were abnormal. The chest x-ray demonstrated the right ventricular lead was dislodgment. The ventricular lead moved into pulmonary artery.

Methods: We were not certain about the relationship between the lead and both pulmonary and aorta artery walls. We decided to remove the ventricular lead by a snare system in our hybrid catheter room in case we need open chest surgery to repair pulmonary wall. Detailed angiography of aorta was performed during the operation in order to clarify if any damage was implicit upon the aorta wall. The ventricular lead was removed by the snare without any difficulty and a new ventricular lead was been replaced.

Result: A CTPA was performed after ventricular lead removal and showed embolism in right pulmonary artery. This complication might imply that slight damage upon the artery wall have been caused during the removal procedure. The patient then received rivaroxaban 10mg twice a day for 3 months.

Conclusion: A very rare senario of ventricular dislocation and the reason was not very clear.