October 16 - 18
14th EDITION 2015

ICD leads evolution

NEARLY HALF A CENTURY OF
ACCOMPLISHMENTS: WHAT'S STILL NEEDED?

What can the implanter do to avoid lead extraction or to make it easier?

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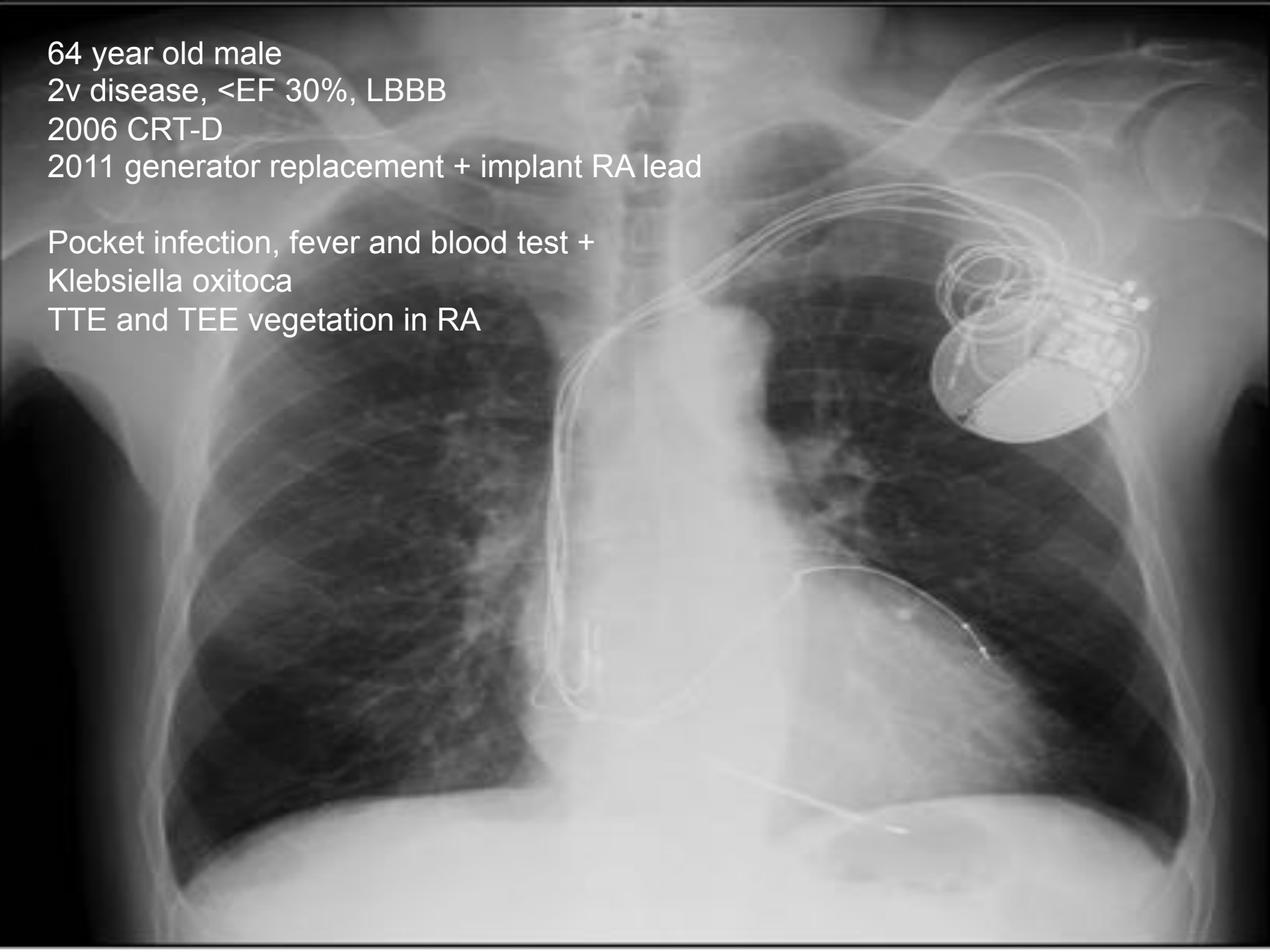
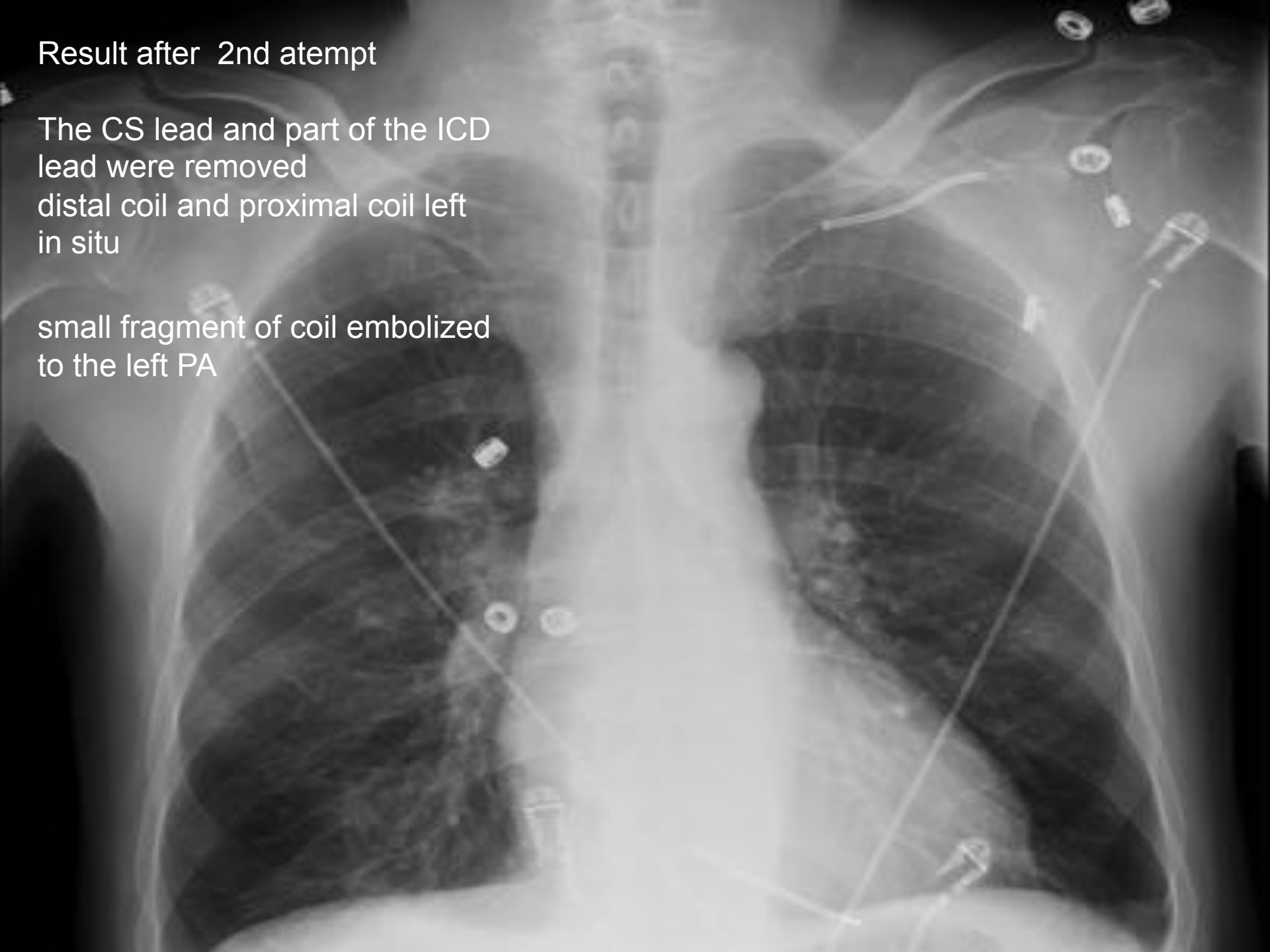
NO CONFLICT OF INTEREST TO DECLARE

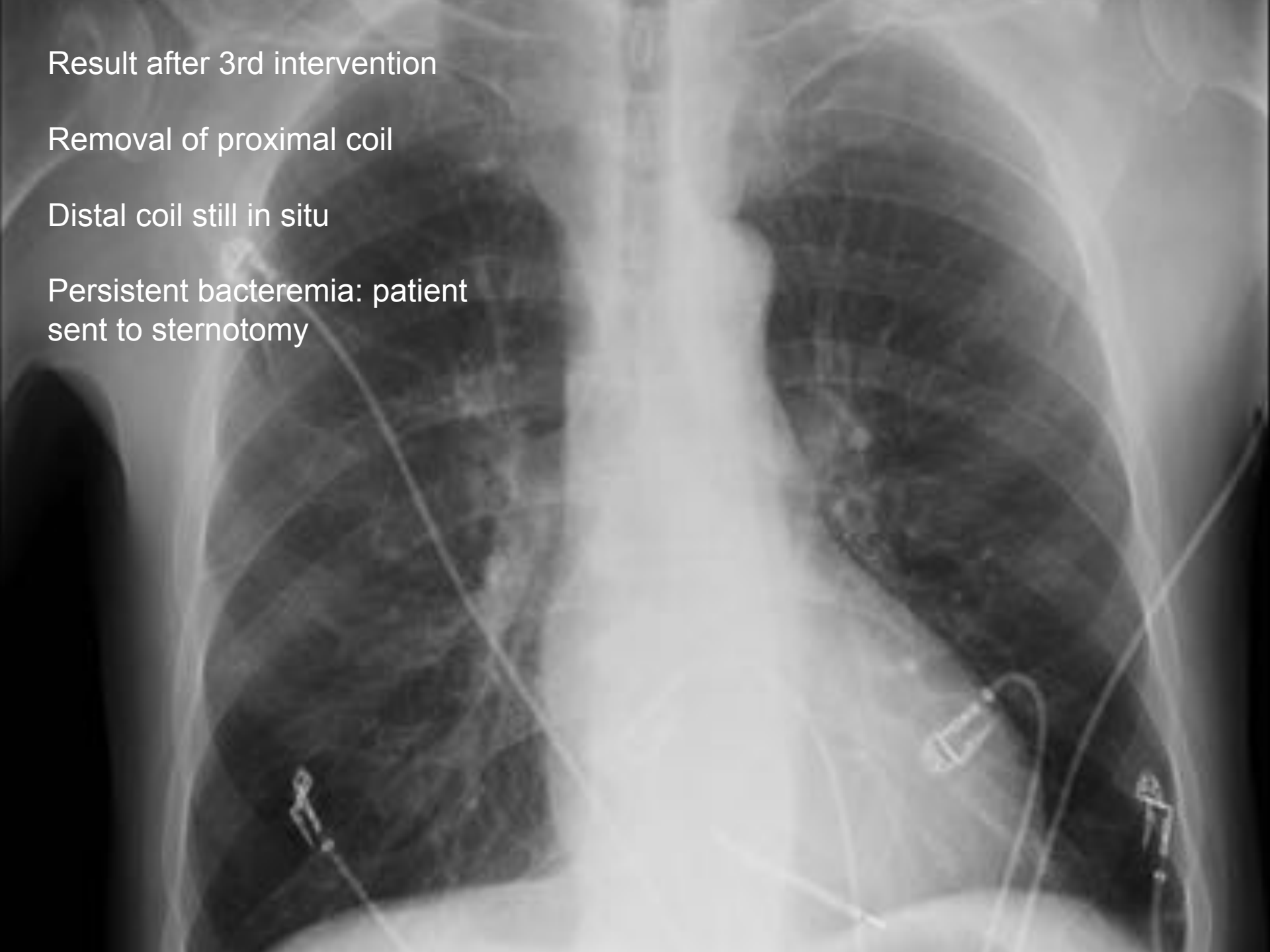
What can the implanter do to avoid lead extraction or to make it easier?

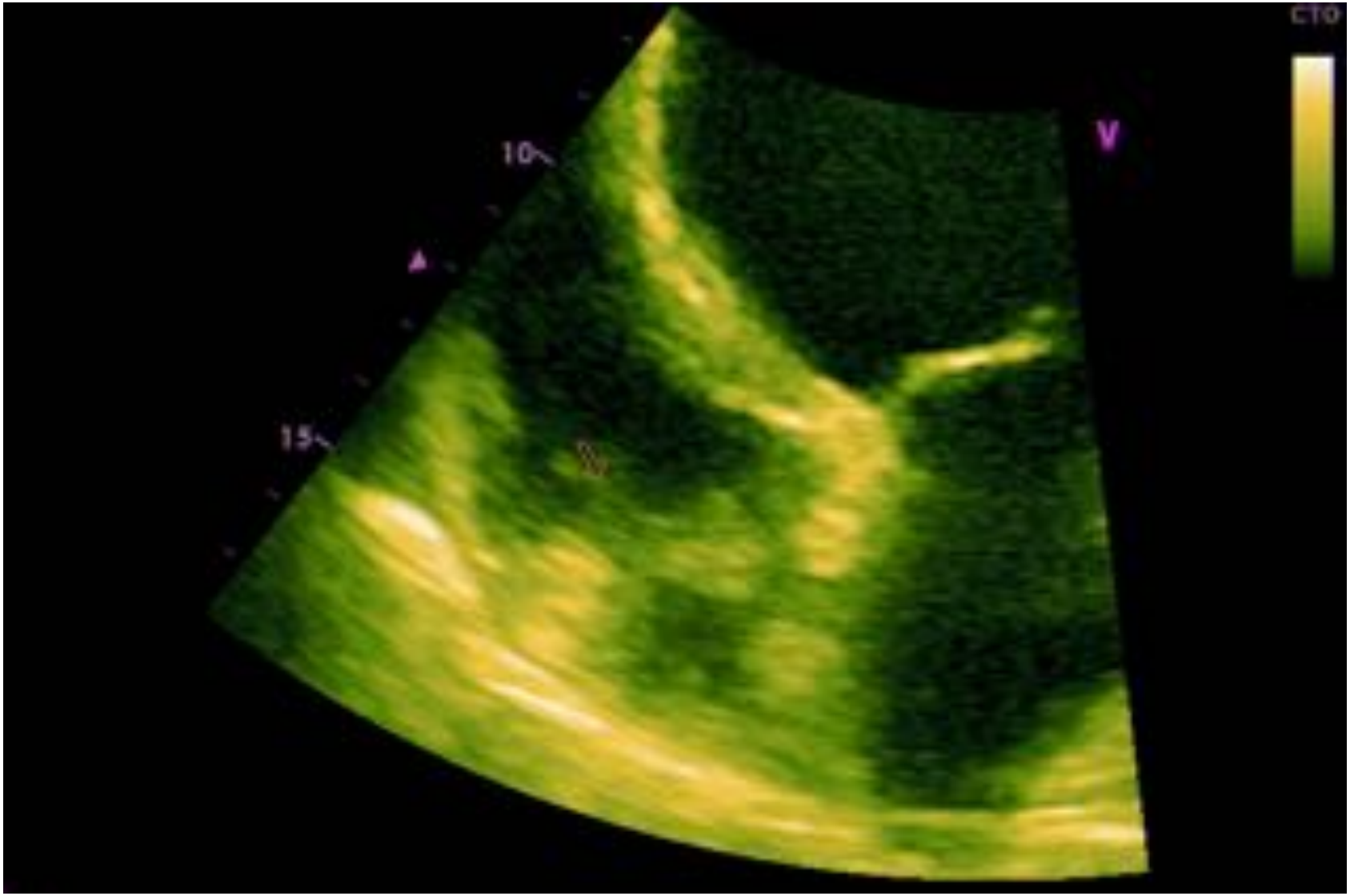
- All preventive measures of device infection (Skin antiseptic agents, antibiotic prophylaxis, postoperative antibiotics, Antibacterial envelope, sub-pectoral implants, decolonization of nasal carriers of S aureus, Topical antibiotics)
- Avoid the medial subclavian vein approach
- Isodiametric lead with active fixation leads
- Reduce the number of leads (VDD ICD?)
- Leads with Gore-tex insulation
- Single coil-ICD lead
- Use of transvenous leadless devices: S-ICD, leadless pacemaker

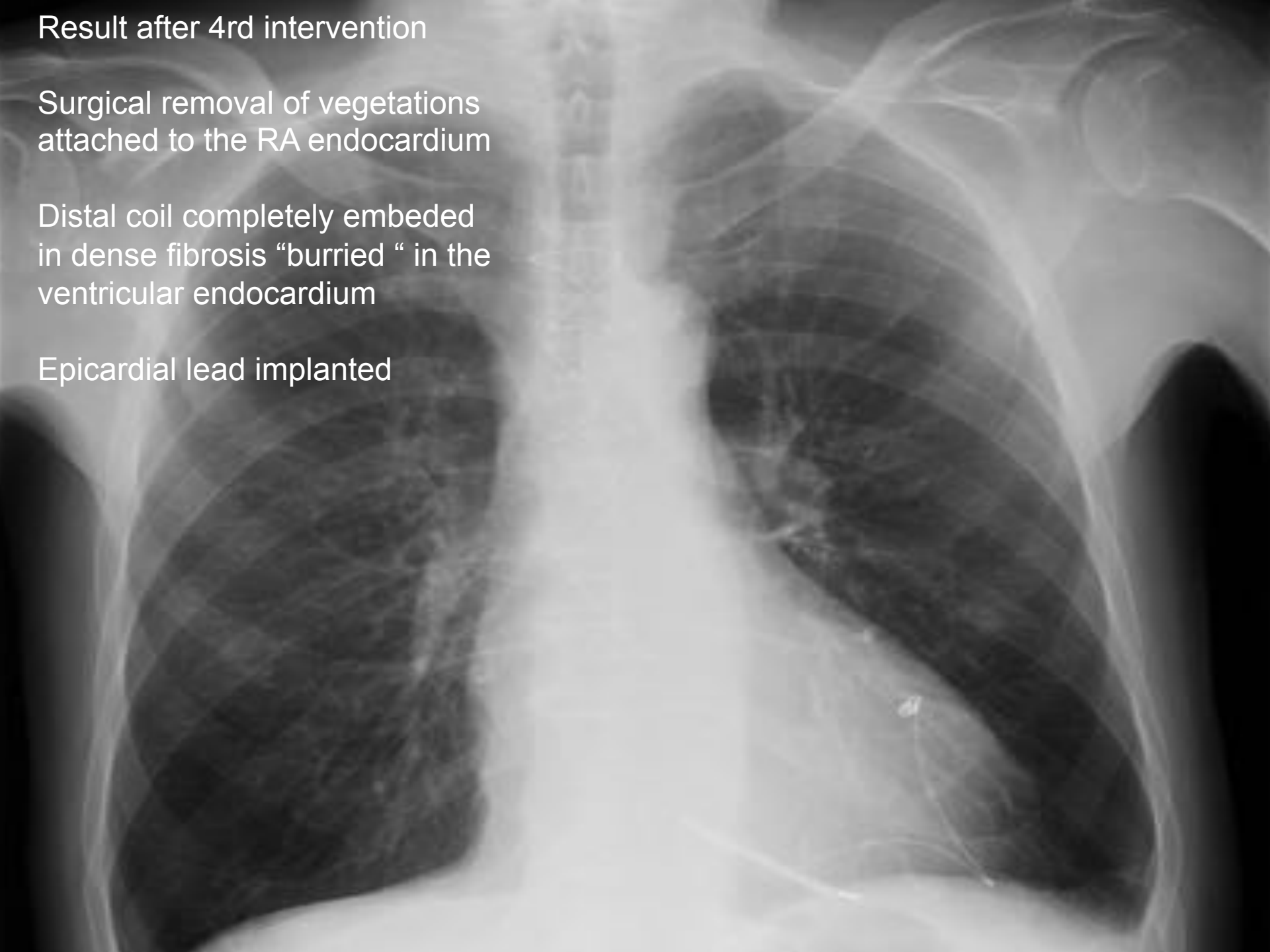

64 year old male
2v disease, <EF 30%, LBBB
2006 CRT-D
2011 generator replacement + implant RA lead
Pocket infection, fever and blood test +
Klebsiella oxitoca
TTE and TEE vegetation in RA

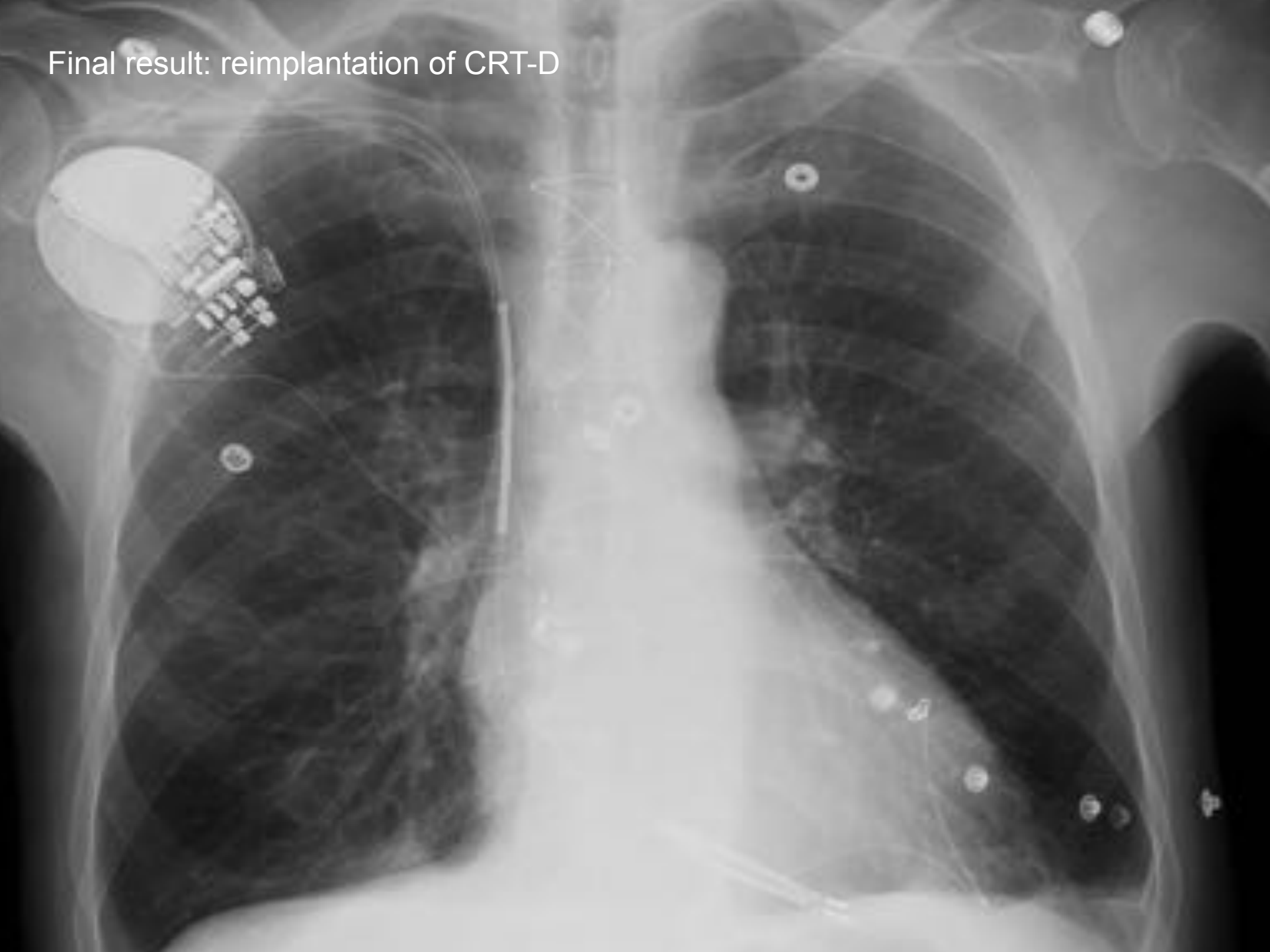

Result after 1st atempt
Successful extraction of both RA leads
ICD lead and CS lead fractured and retained
Distal coil remained in place and proximal coil retracted to subclavivular area


Result after 2nd atempt
The CS lead and part of the ICD lead were removed
distal coil and proximal coil left in situ
small fragment of coil embolized to the left PA


Result after 3rd intervention
Removal of proximal coil
Distal coil still in situ
Persistent bacteremia: patient sent to sternotomy


CTO
10
15
V


Result after 4rd intervention
Surgical removal of vegetations attached to the RA endocardium
Distal coil completely embeded in dense fibrosis “burried “ in the ventricular endocardium
Epicardial lead implanted


Final result: reimplantation of CRT-D