FISHING DISLODGED HARDWARE FROM CORONARY ARTERIES

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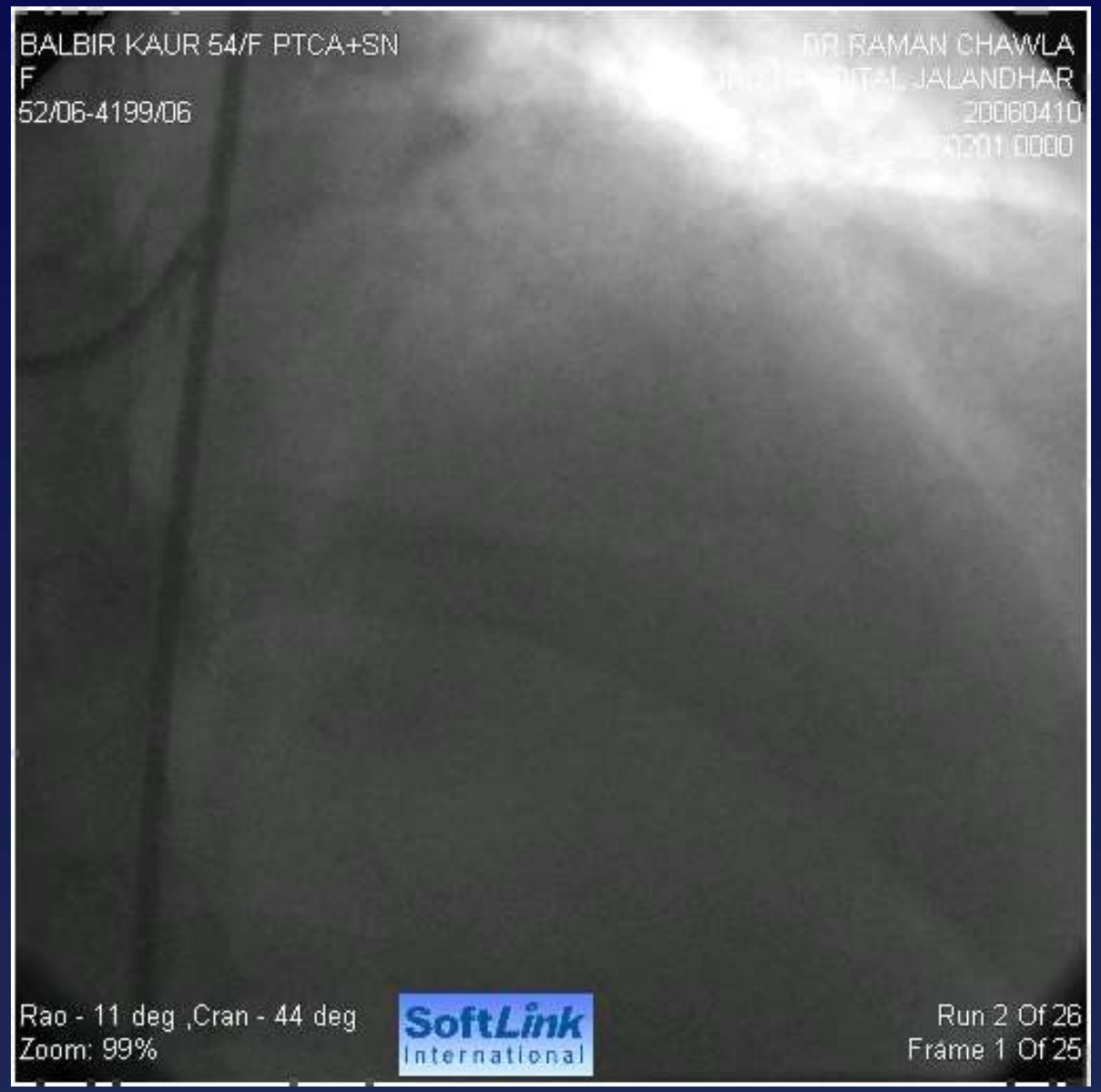
NAMASTE

HISTORY

- 60 year old female presented with unstable angina.
- Hypertensive
- Diabetic
- Routine blood investigations – Normal
- Troponin-T Positive
- Echo – Mild apical hypokinesia
  - -EF 45%
  - -No MR

CORONARY ANGIOGRAPHY

- LMCA- Essentially normal.
- LAD- Type lll large size vessel & shows 95% eccentric, calcified lesion at proximal segment.
- LCX- Small size vessel & shows diffuse disease.
- RCA- Small size vessel & shows diffuse disease.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PLAN

- PCI OF LAD

PROCEDURE

- Femoral Approach
- Guiding Catheter 6F JL 3.5
- Guide Wire 0.014 Choice PT Extra Support
- Pre dilated with 2.5 x 15 mm Balloon

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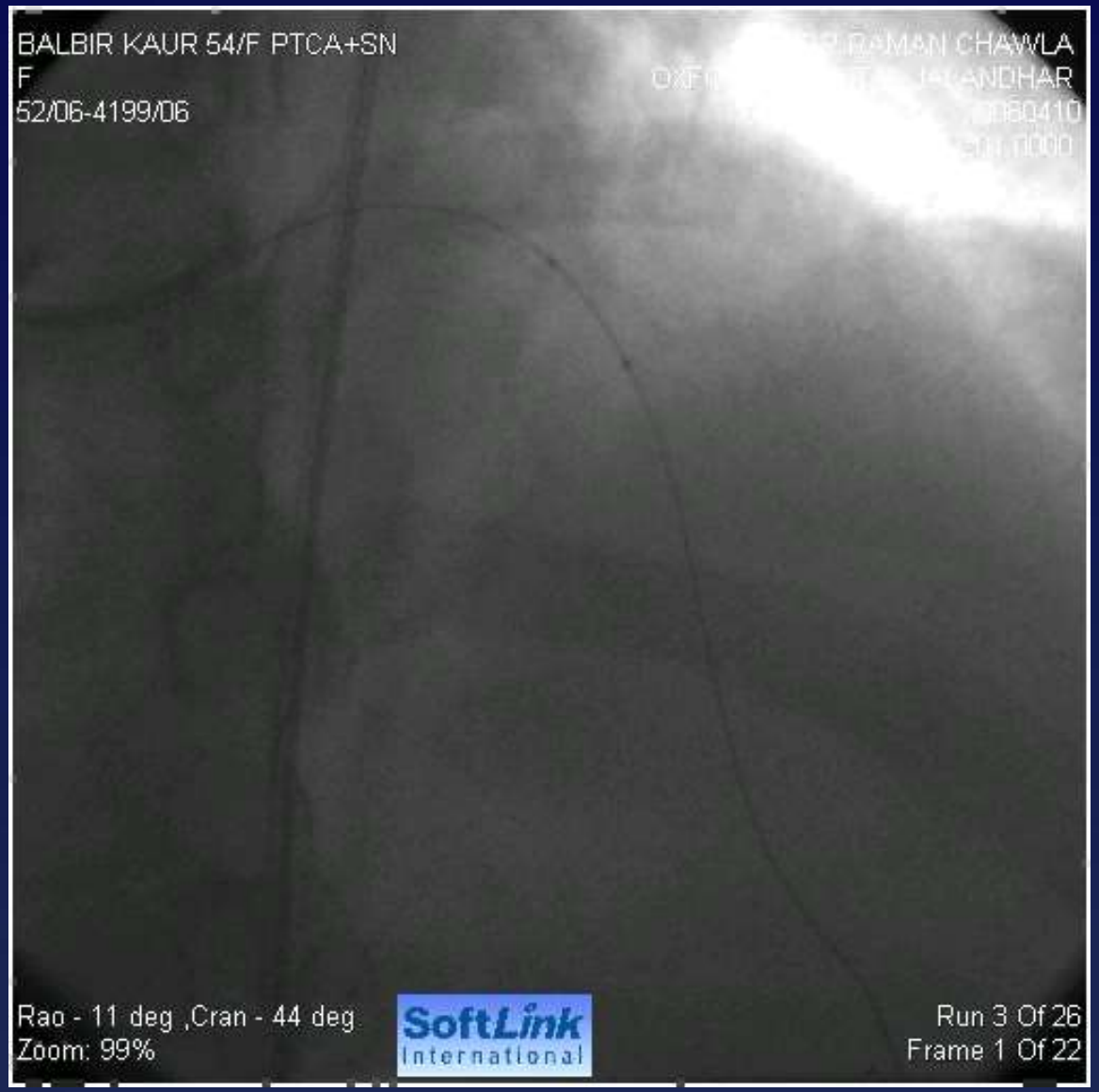
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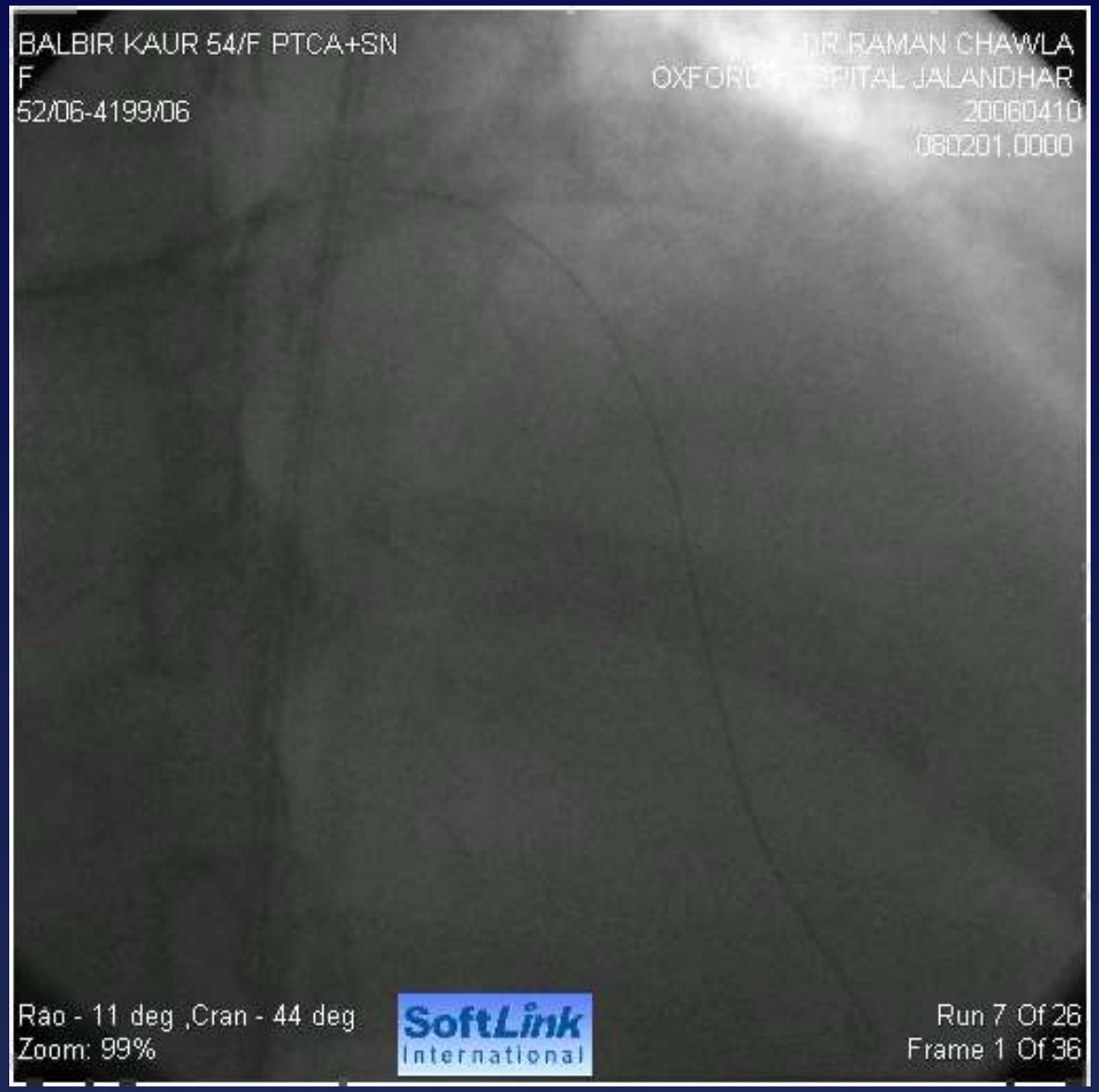
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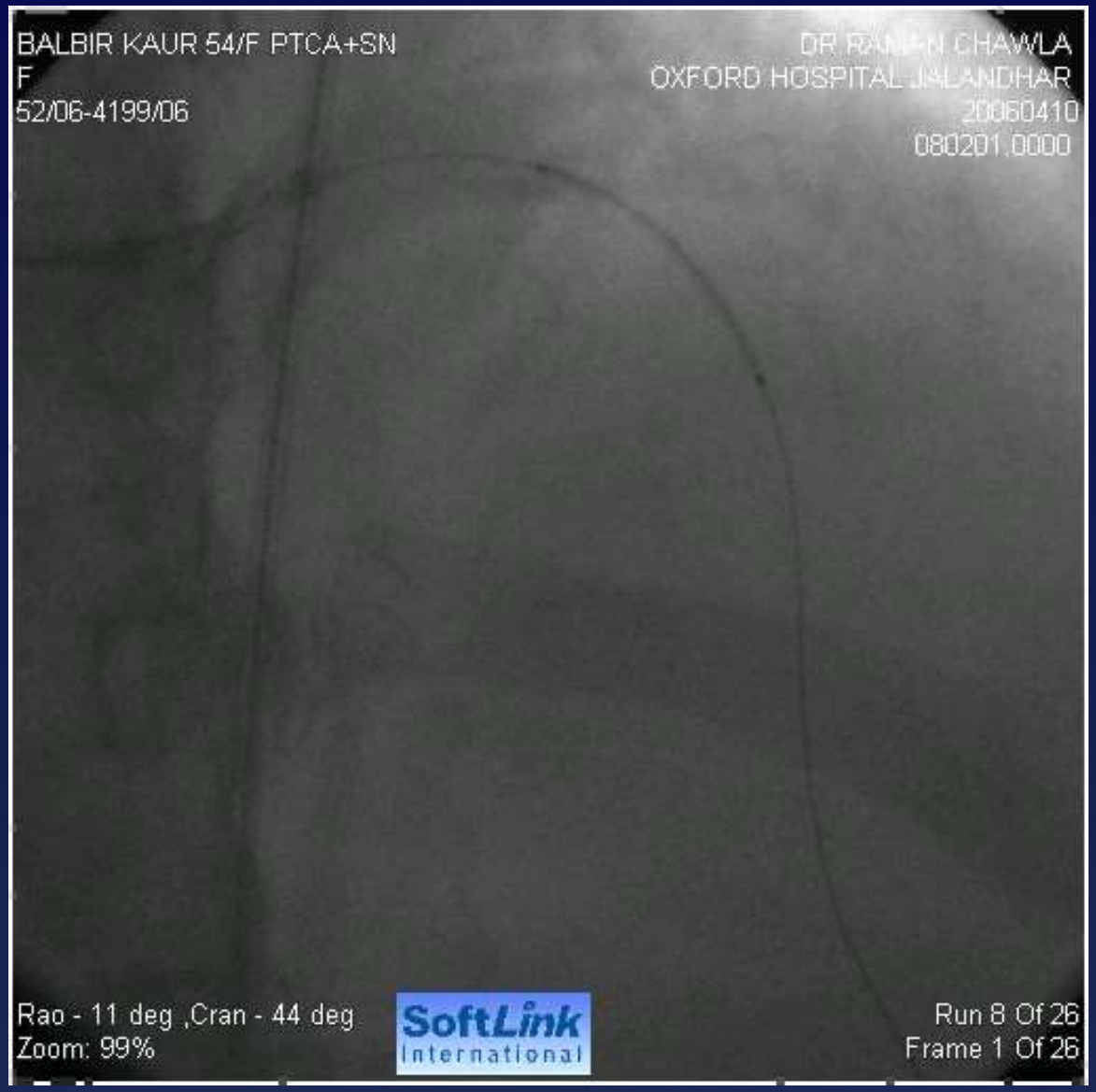
PROCEDURE CONTINUED

- DES 3.0 X 28 MM
- STENT LENGTH WAS SHORTER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PROCEDURE CONTINUED

- ATTEMPTED WITHDRAWAL OF STENT
- STENT DISLODGED FROM BALLOON INTO LEFT- MAIN CORONARY ARTERY.

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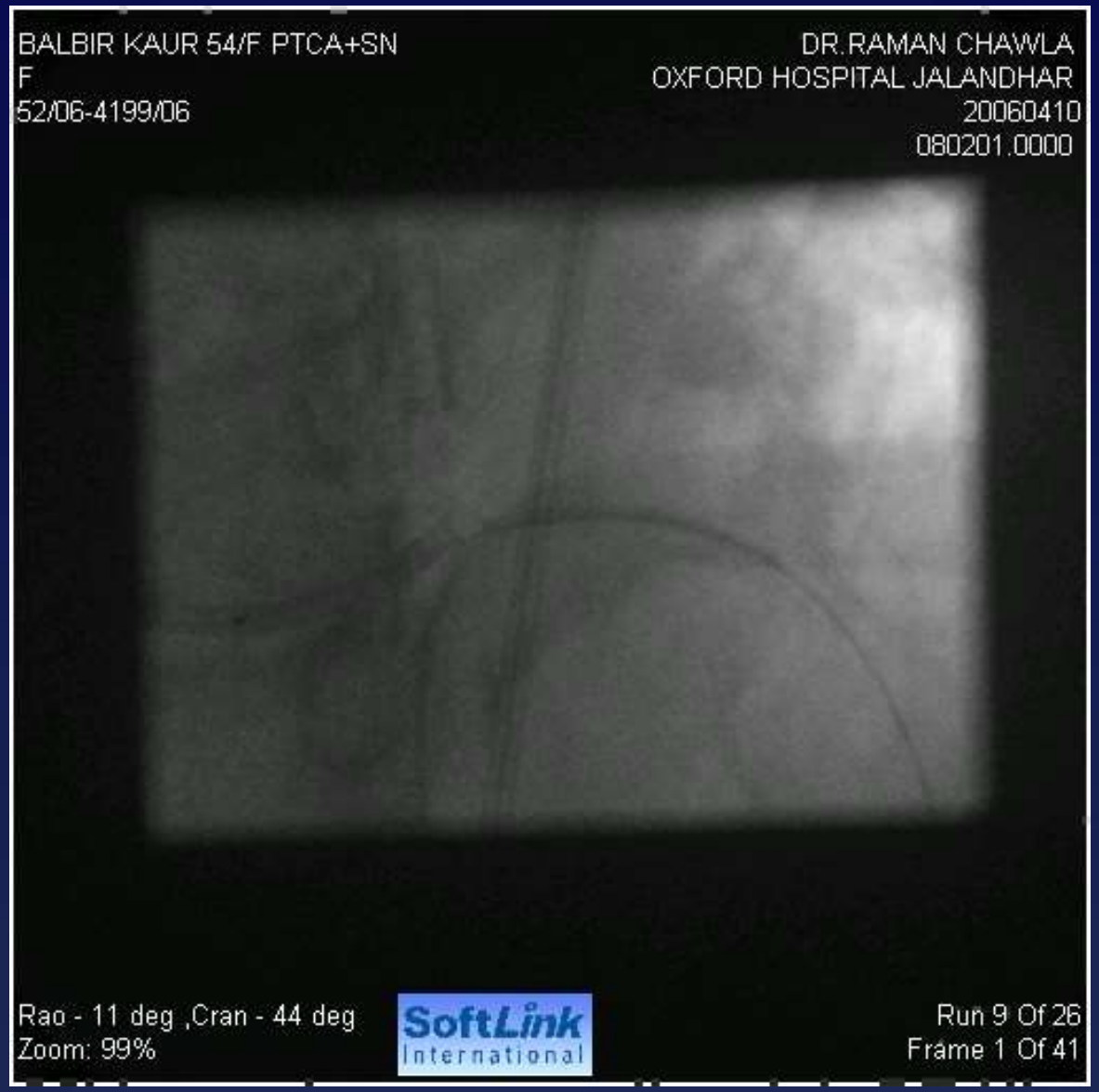
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OPTIONS TO RETRIEVE THE STENT

- INTERTWINING OF WIRES
- DISTAL BALLOON INFLATION
- SNARING OF THE STENT

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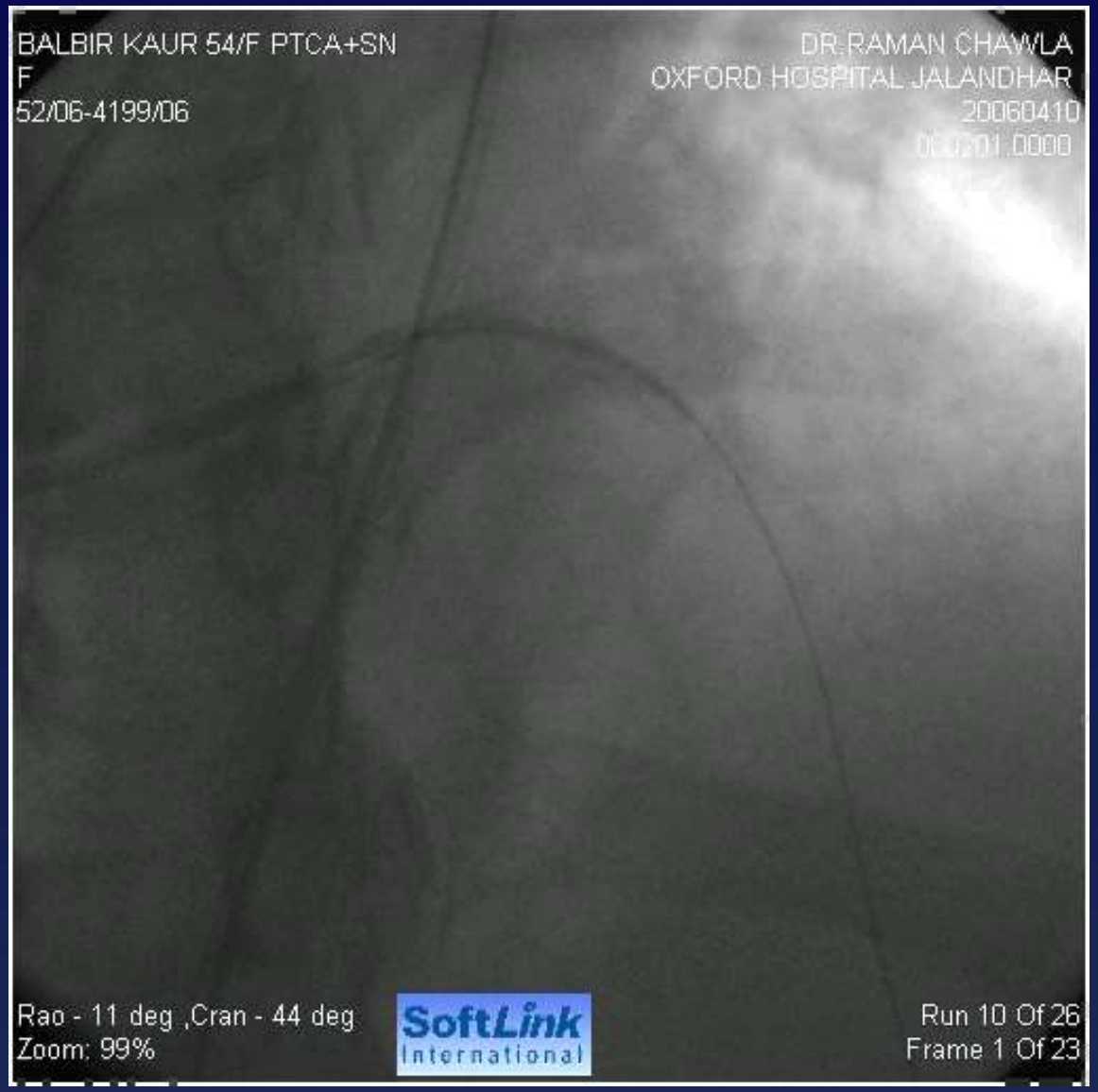
PROCEDURE CONTINUED

- Snaring of stent being done.
- Patient started having chest pain and hypotension till partial removal of guide wire and strent.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PROCEDURE CONTINUED

Is LAD getting occluded?

- How to check and prevent vessel occlusion
- Need to maintain guide wire position.

THE OPTIONS?

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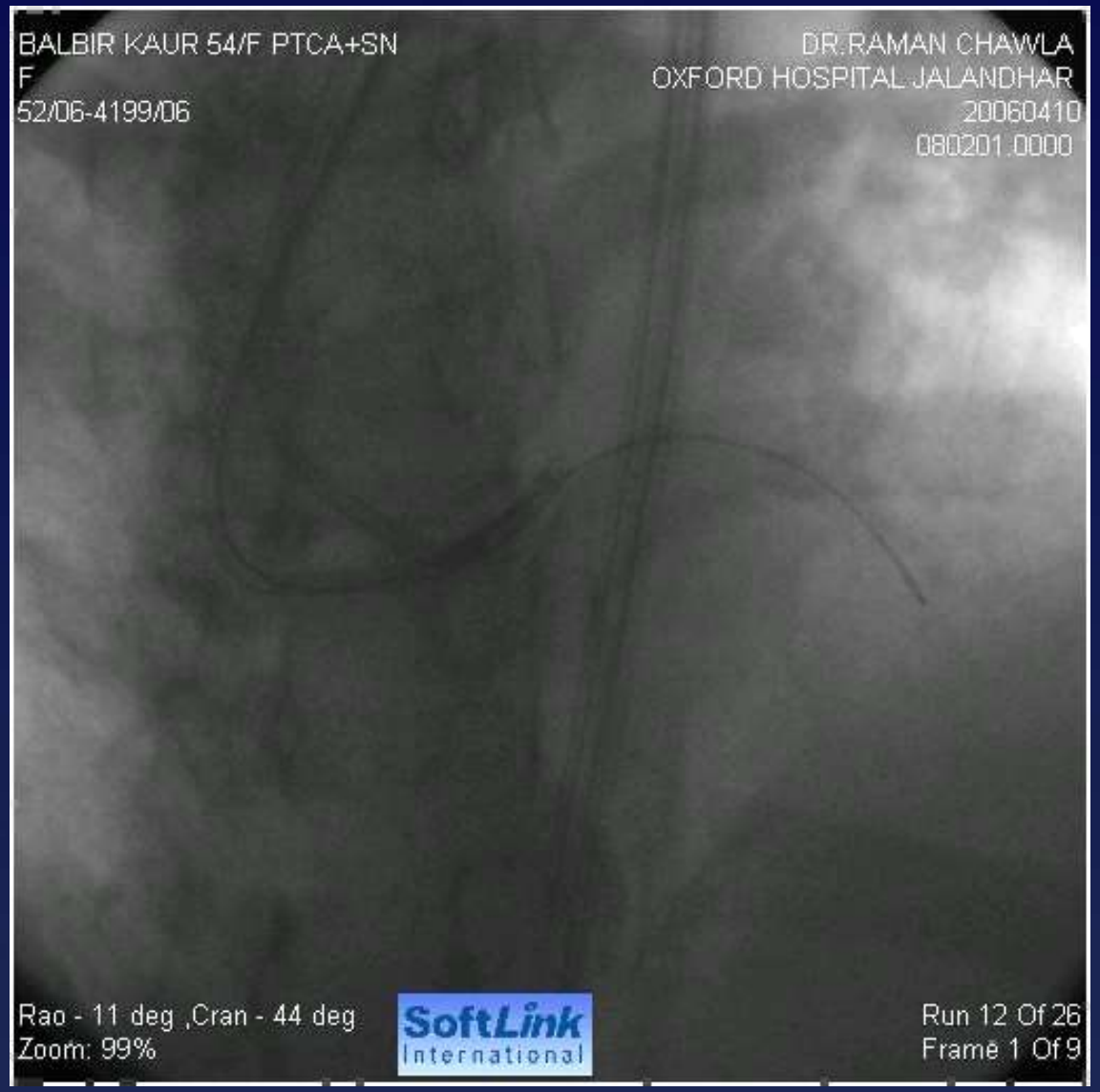
The solution

- Second Guide catheter & Guide Wire from contralateral femoral approach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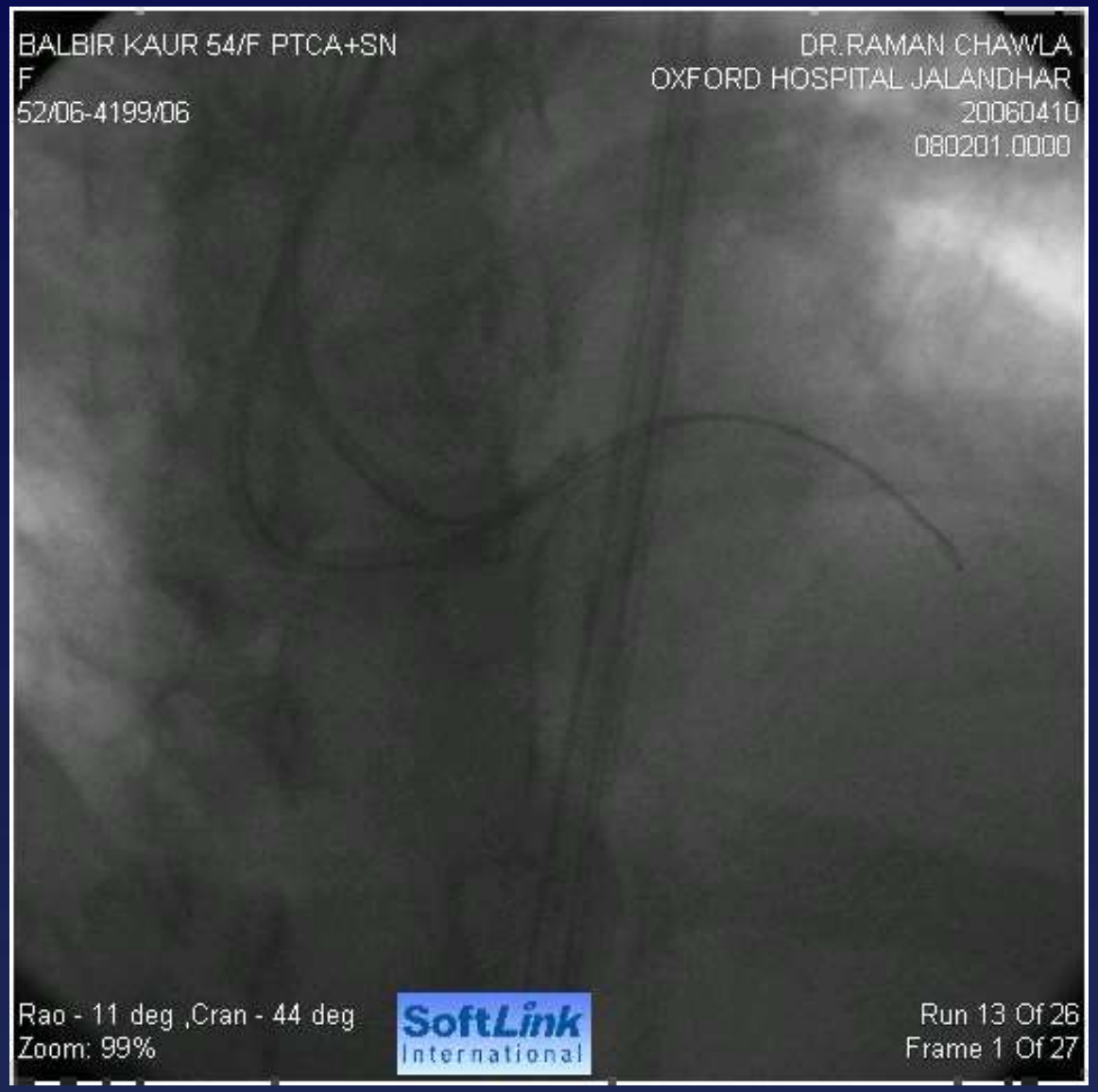
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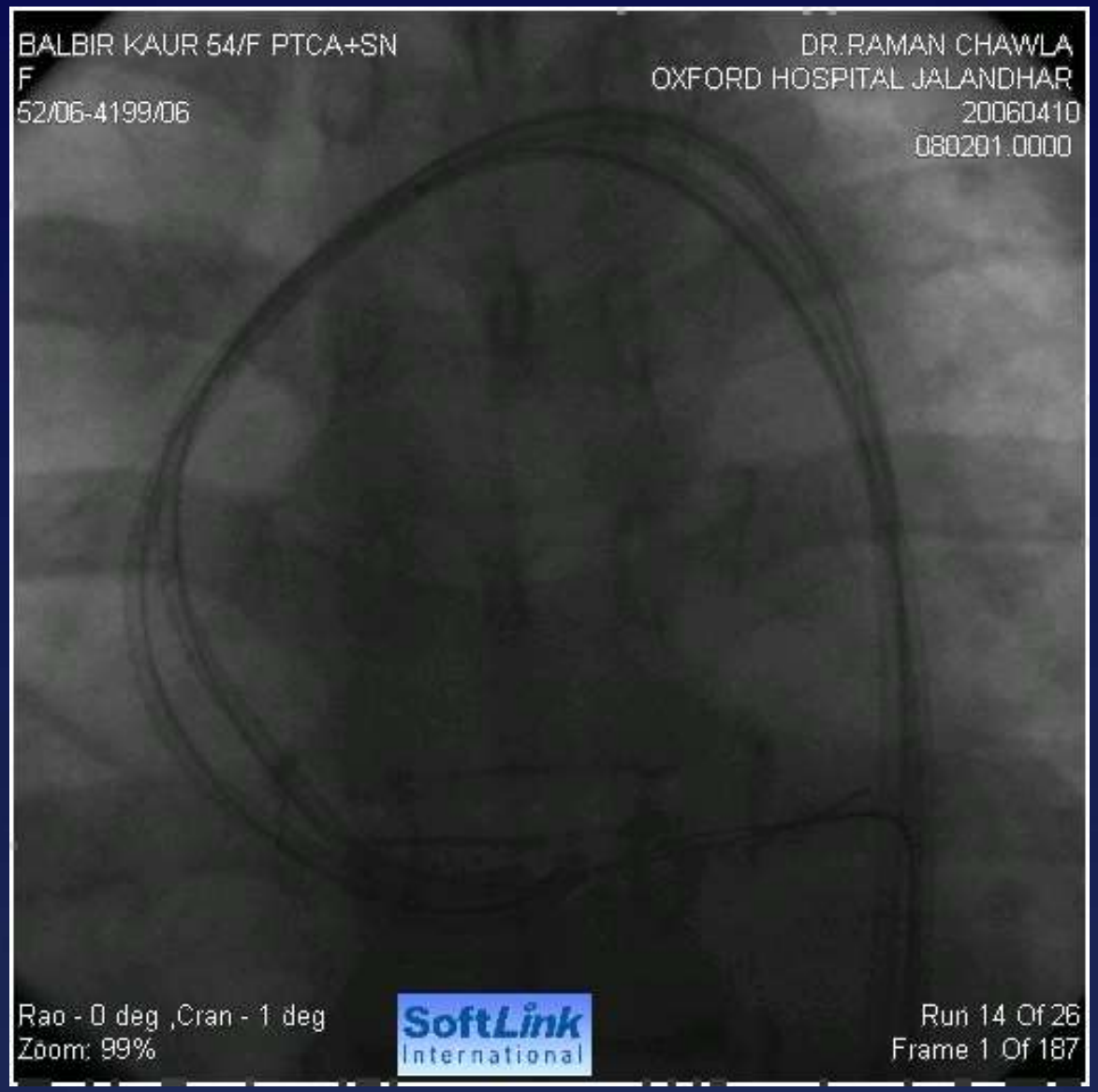
PROCEDURE CONTINUED

- Procedure of stent being snaired out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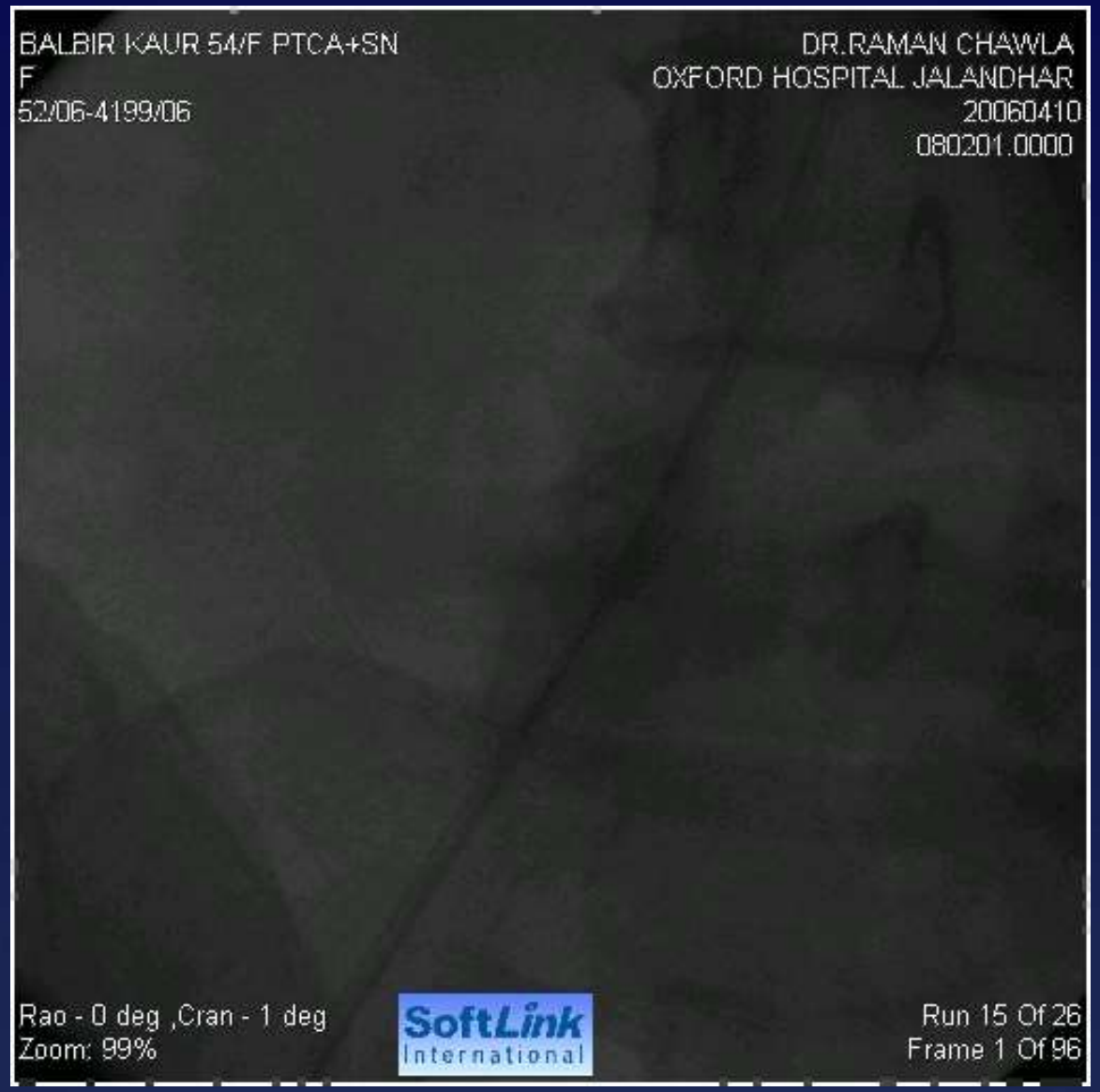
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PROCEDURE CONTINUED

Successful coronary angioplasty was done by using 3.0 x 33 mm stent

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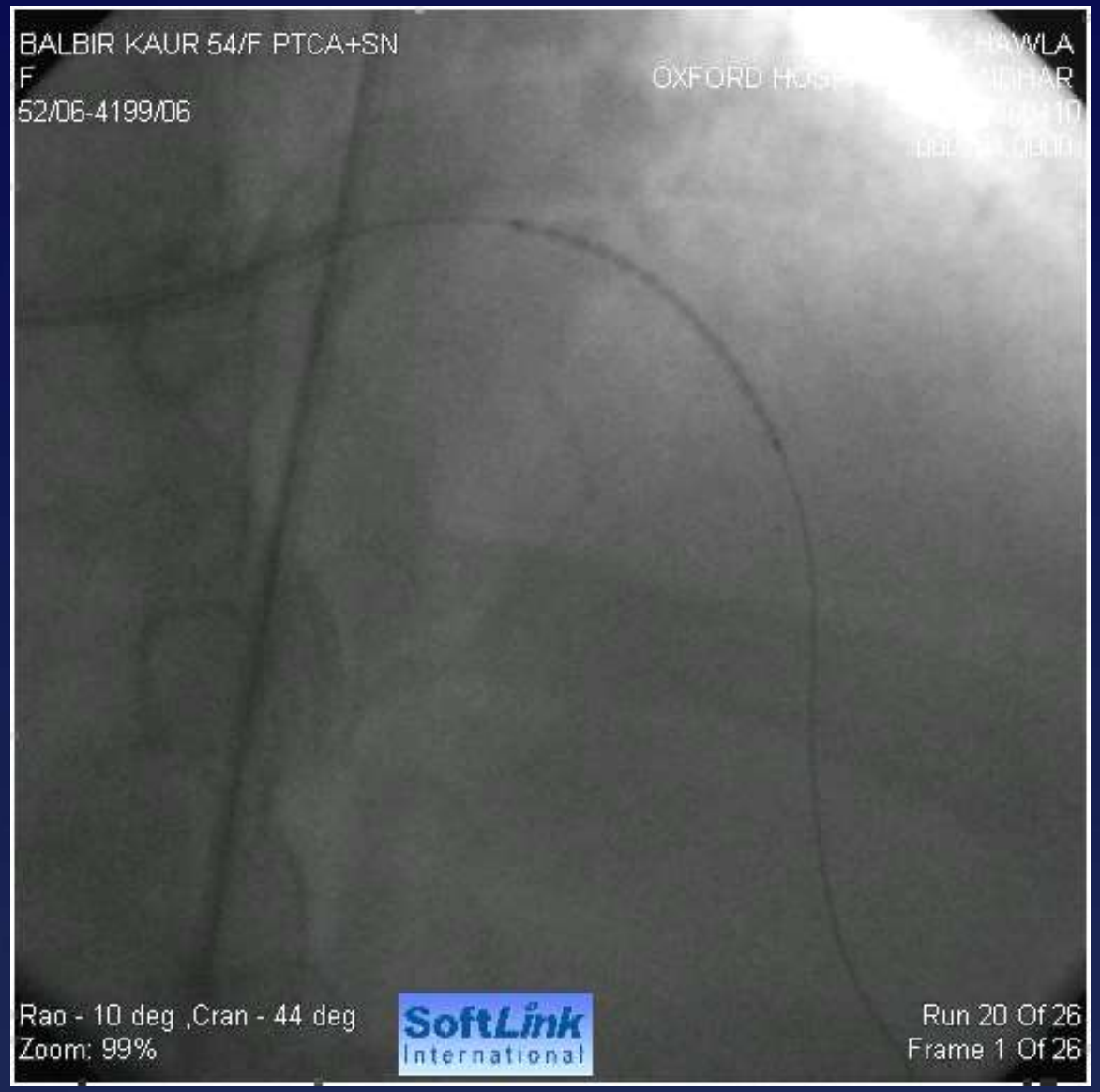
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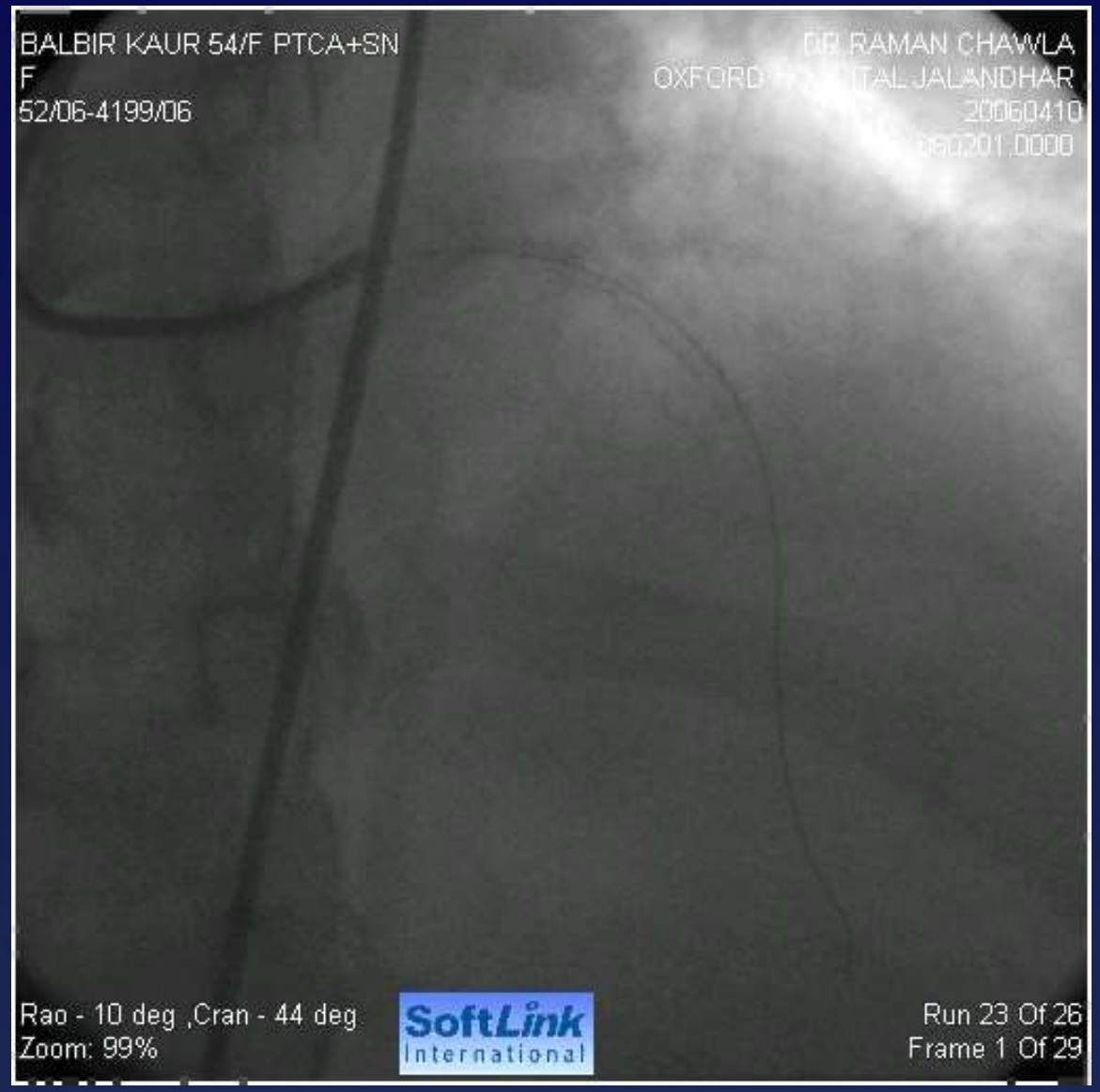
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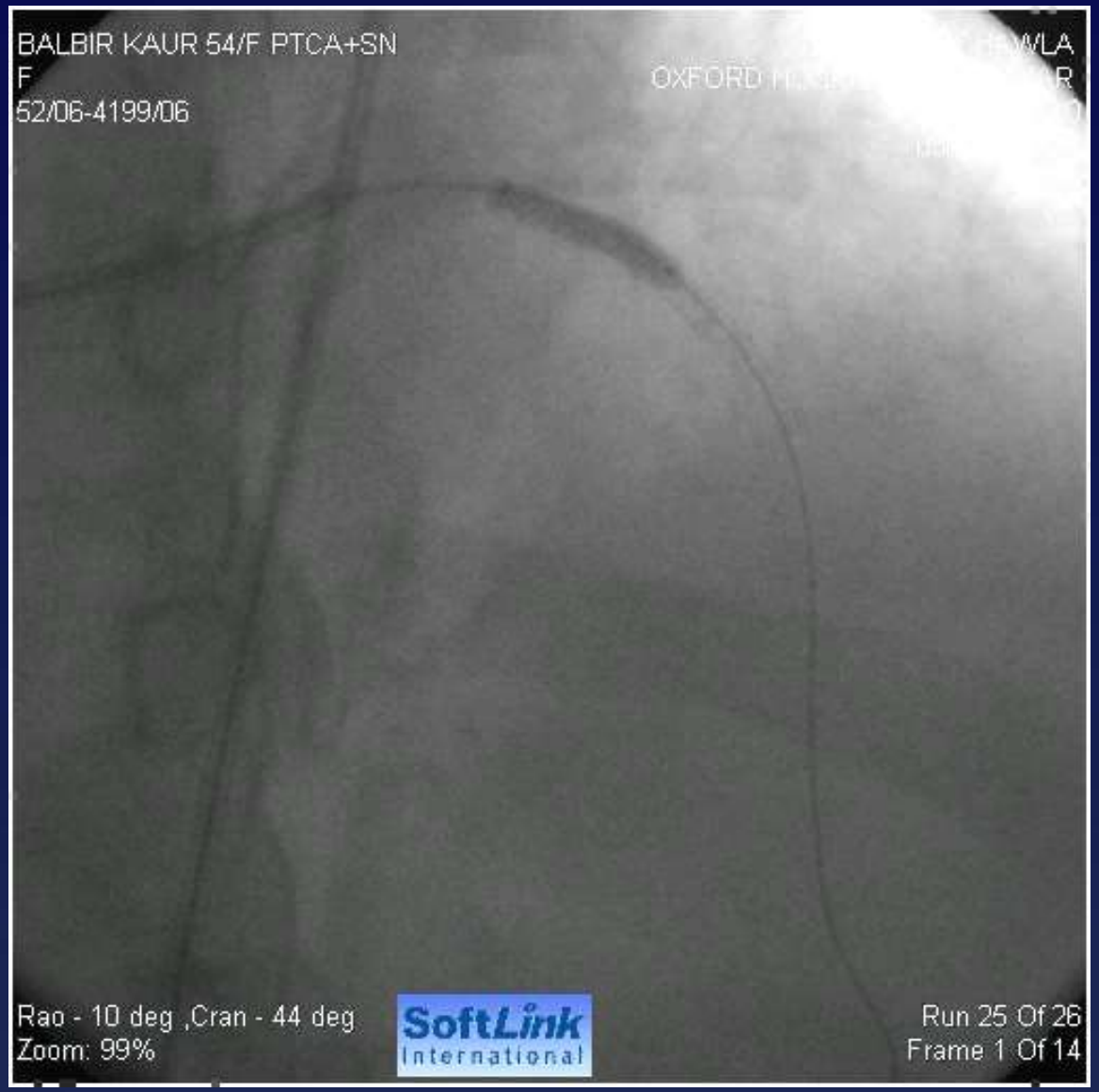
PROCEDURE CONTINUED

Post dilatation done by high pressure balloon upto 20 atmosphere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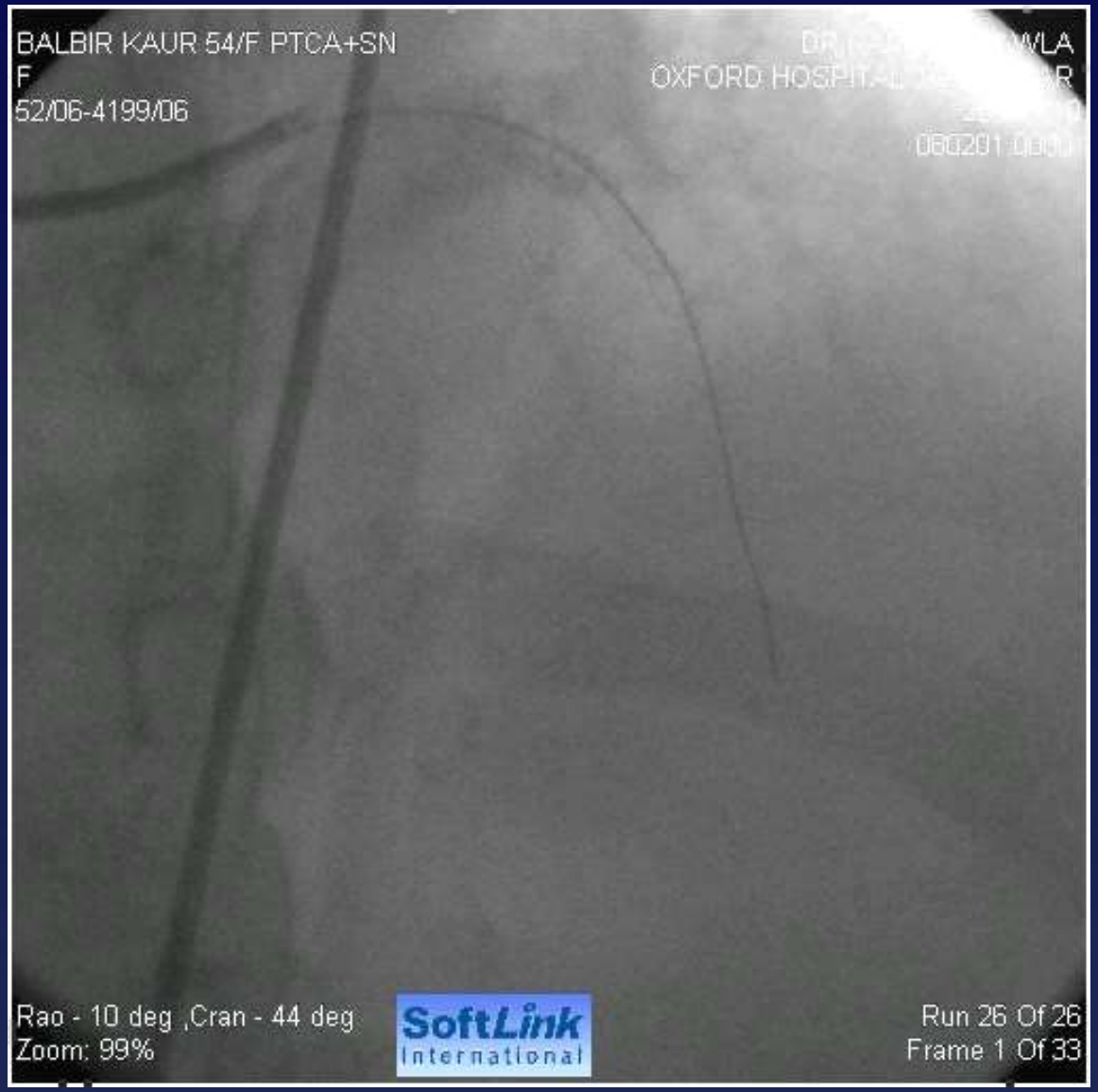
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- Good End Results
- Patient discharged in stable condition.

WAS IT THE END?

CALL ON FIFTH DAY OF DISCHARGE

- Patient again presented with chest pain - AWMI.

- Gross LVF

- Echo – Dilated LV
  - Hypokinesia of apex and anterior wall
  - Moderate MR
  - EF 20%

- Coronary Angiography – LAD thrombus

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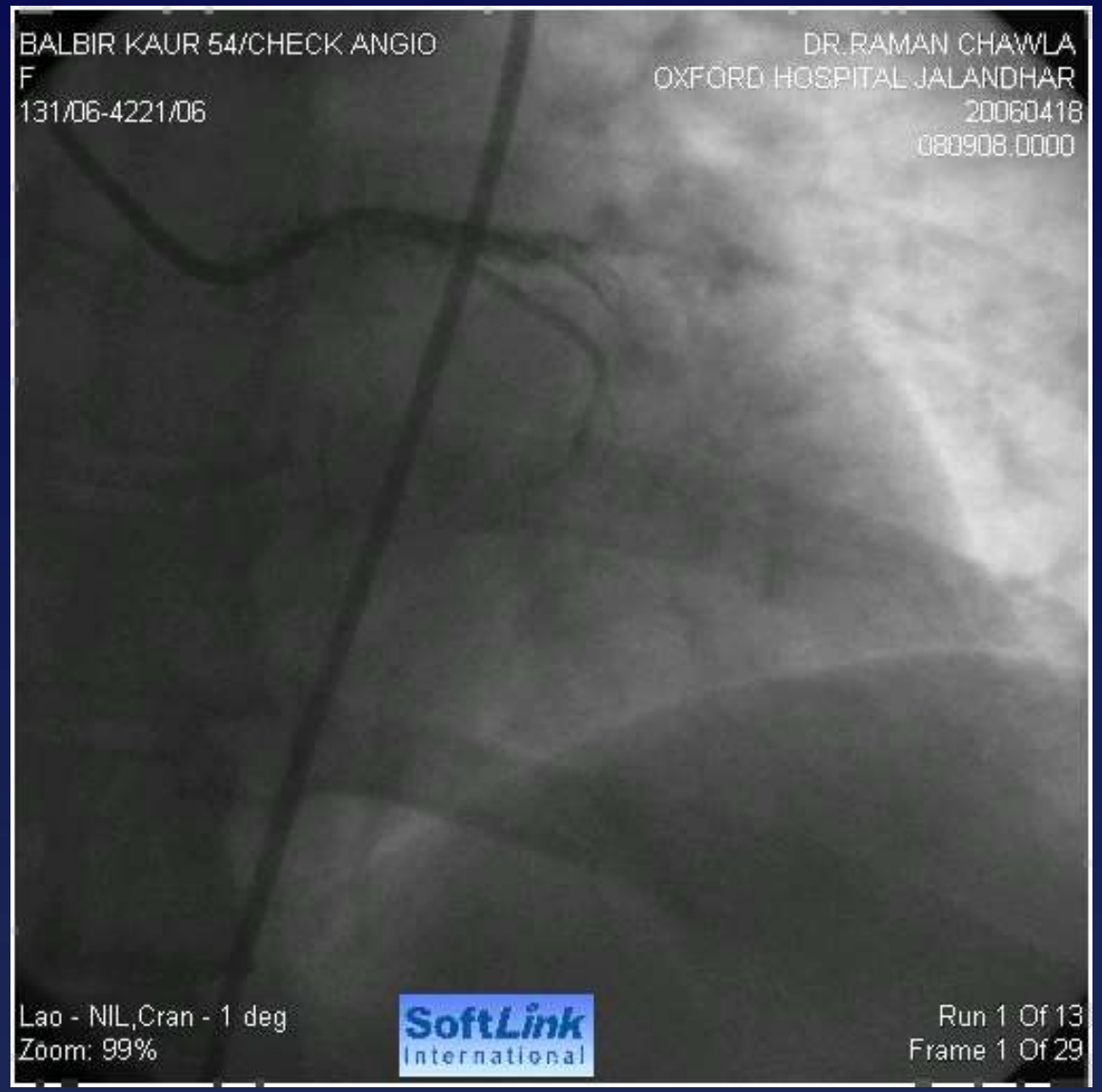
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PROCEDURE

- Re – angioplasty done under cover of inj. Reopro.
- Wire crossed
- Balloon did not cross

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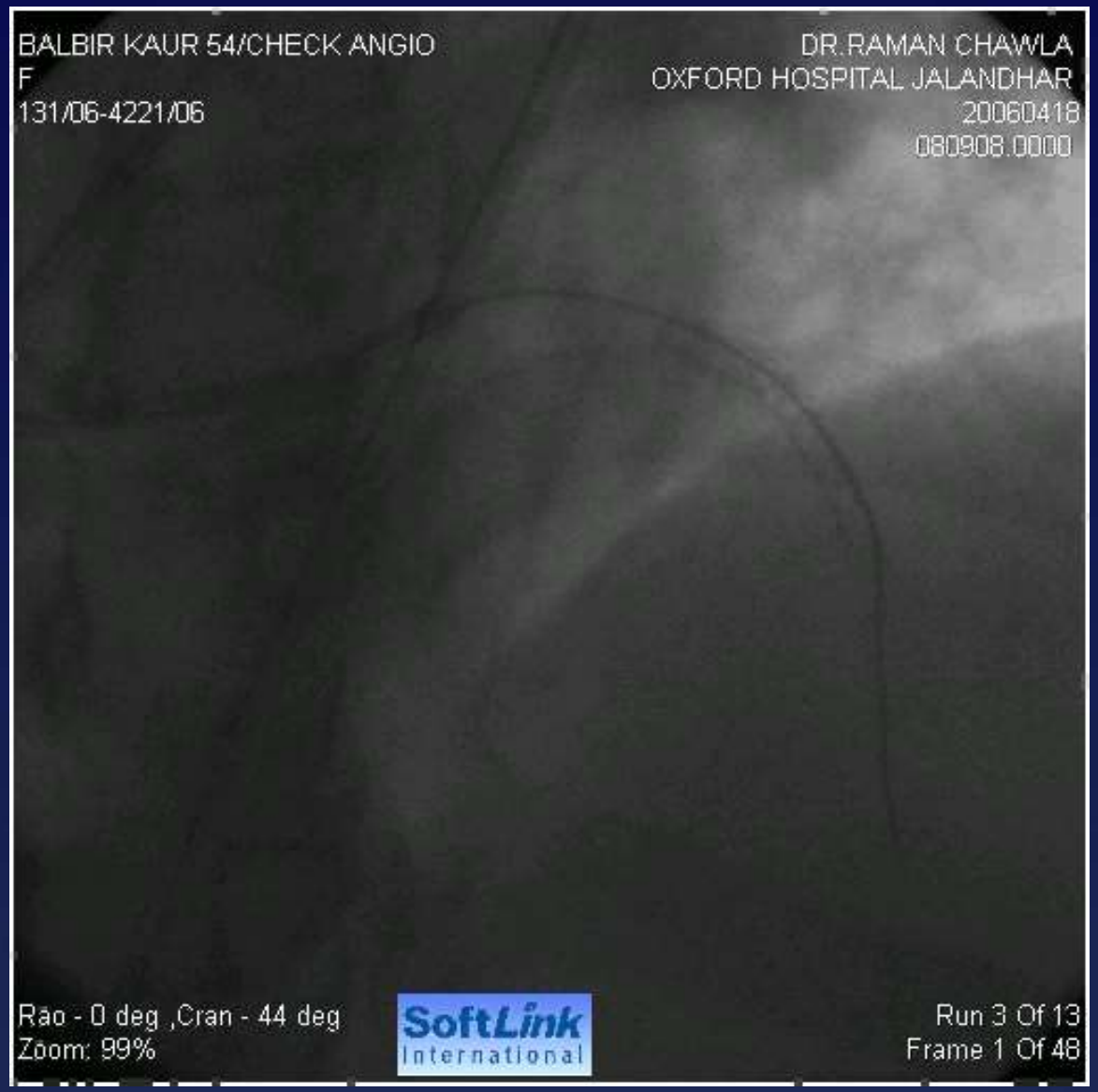
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PROCEDURE CONTINUED

- The wire crossing through stent struts?

PROCEDURE CONTINUED

- Second Wire Crossed
- Difficult Balloon Crossing
- High Pressure Dilatation
- Multiple Balloon Dilatation done

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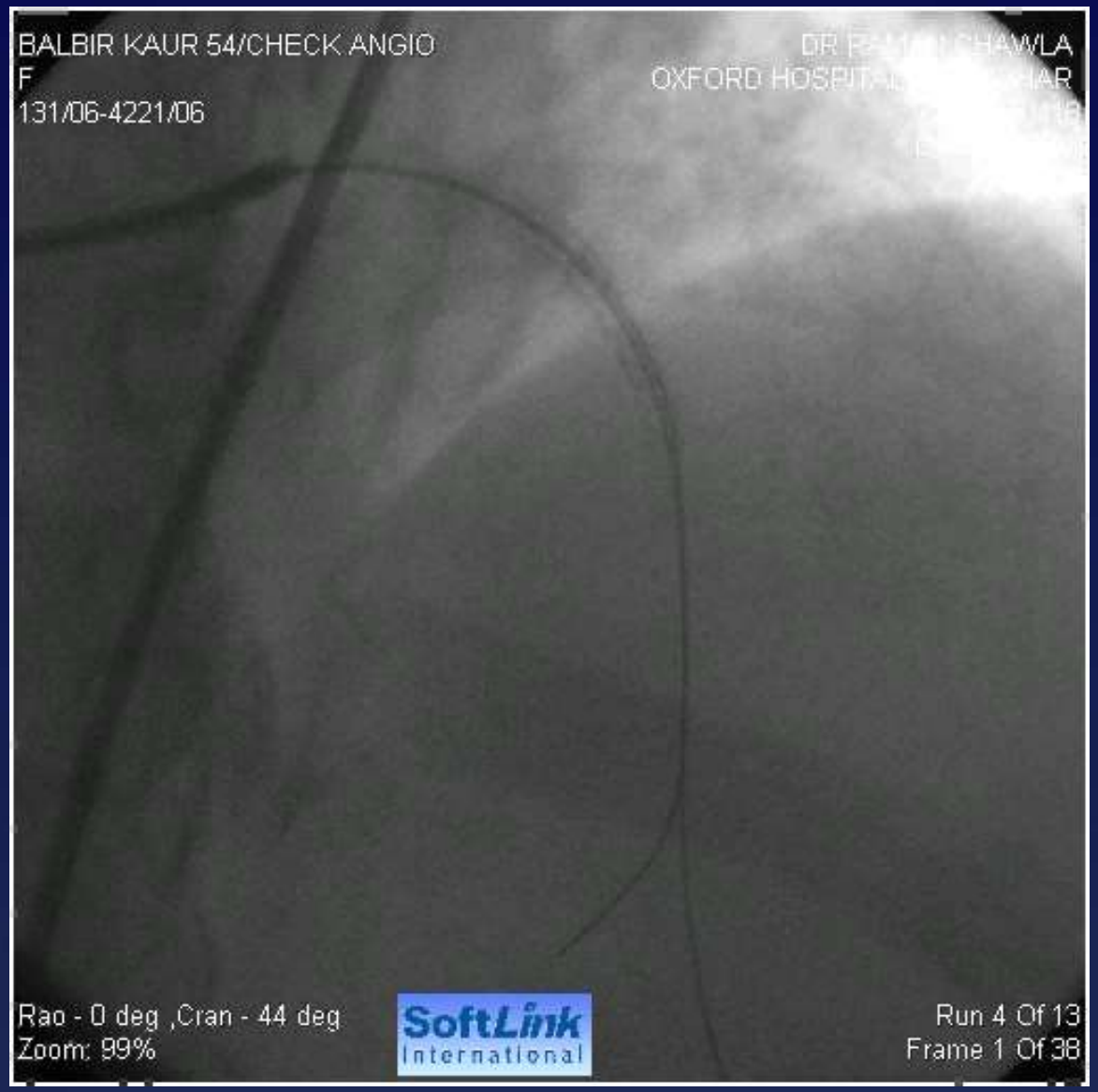
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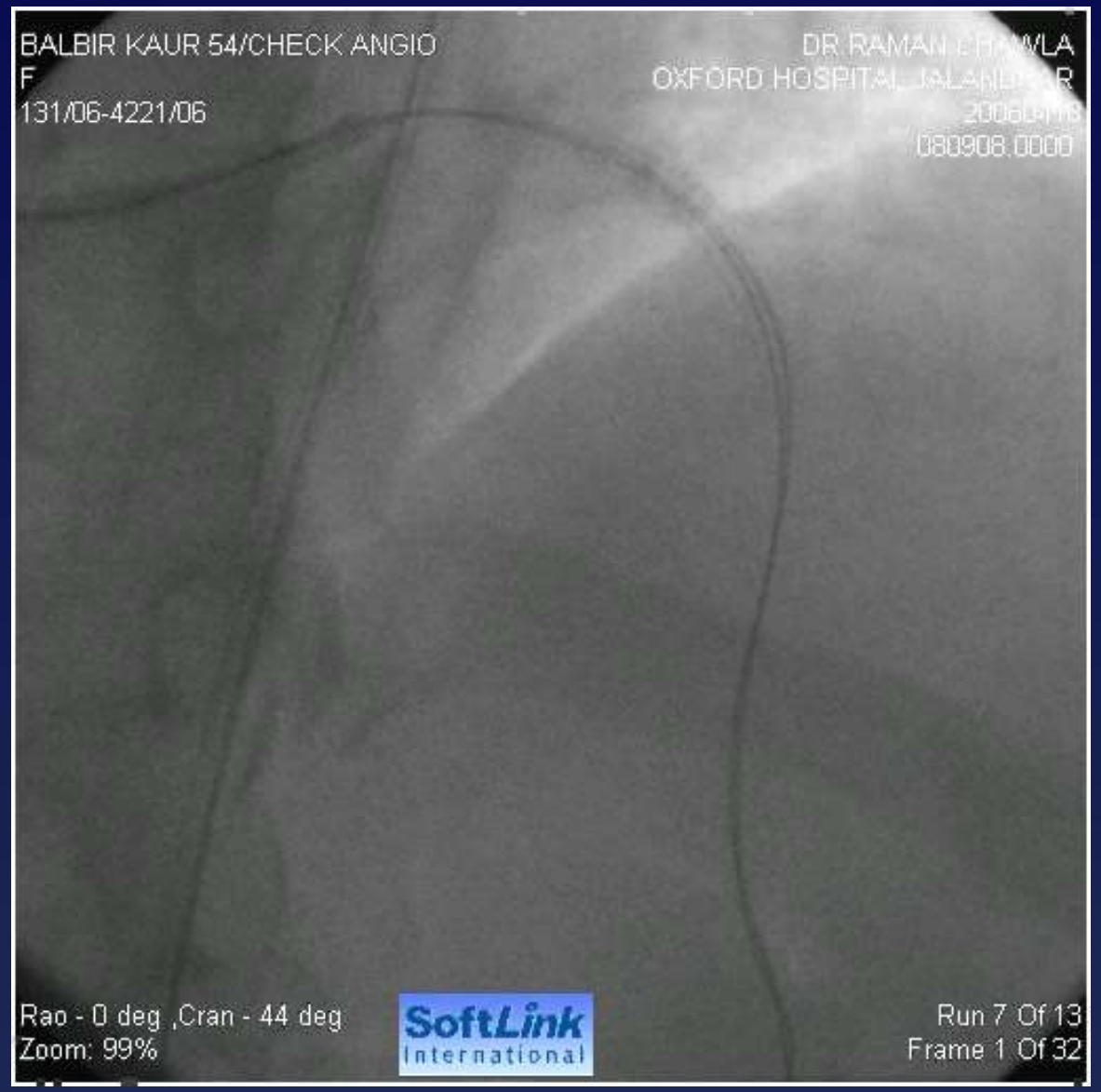
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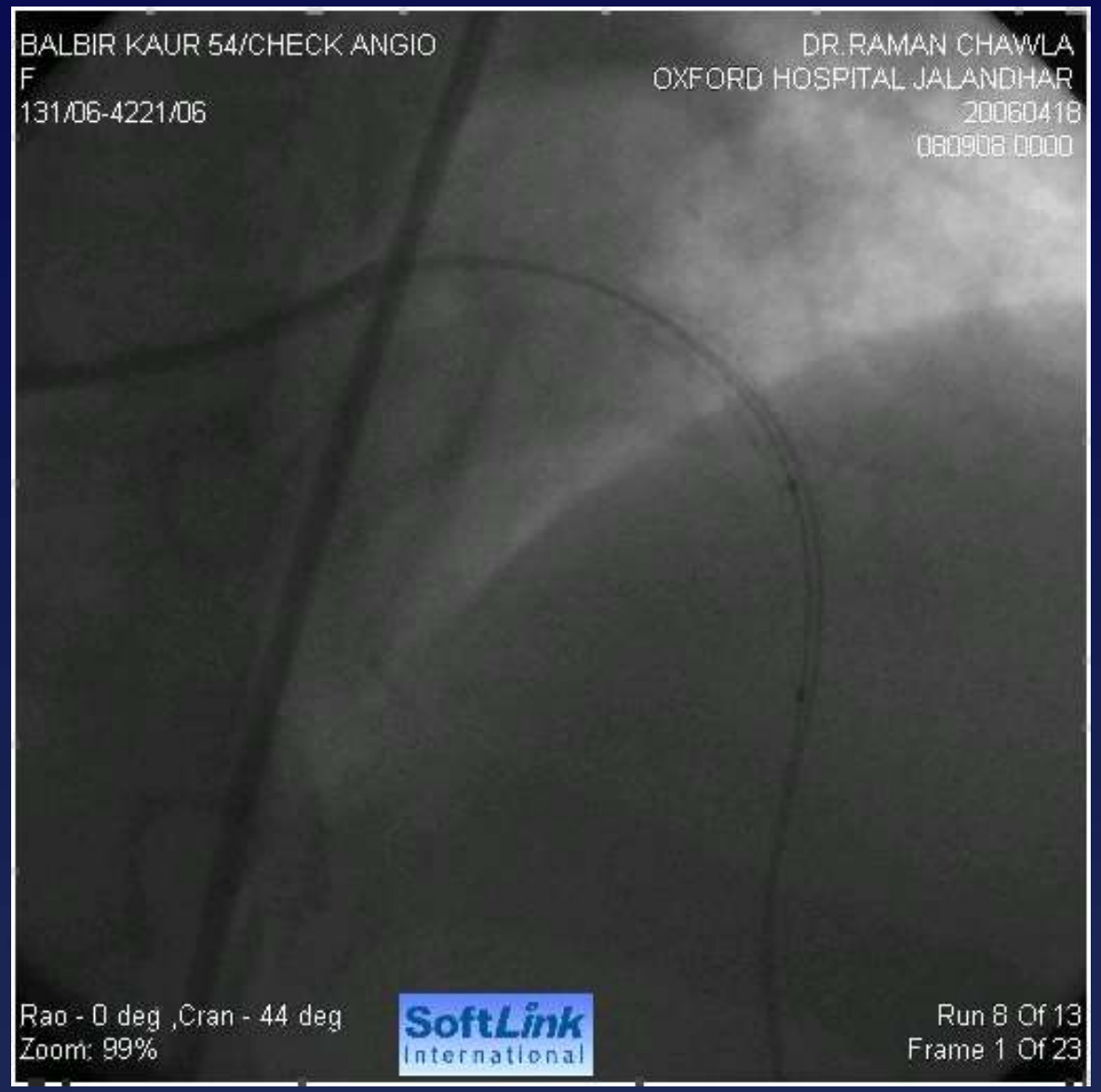
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- Good end results
- Patient discharged in stable condition

Technical Tips And Message

- Choose adequate size stent –preferably longer
- Never withdraw the undeployed stent
- Deploy stent at the same site with the plan to put 2nd stent
- Stent dislodgement generally does not occur at lesion site, but is due to malalignment of guiding ostium and stent

✓ Withdraw guiding out of left main if you want to withdraw the stent for proper alignment

Insert references here

TECHNICAL TIPS AND MESSAGE

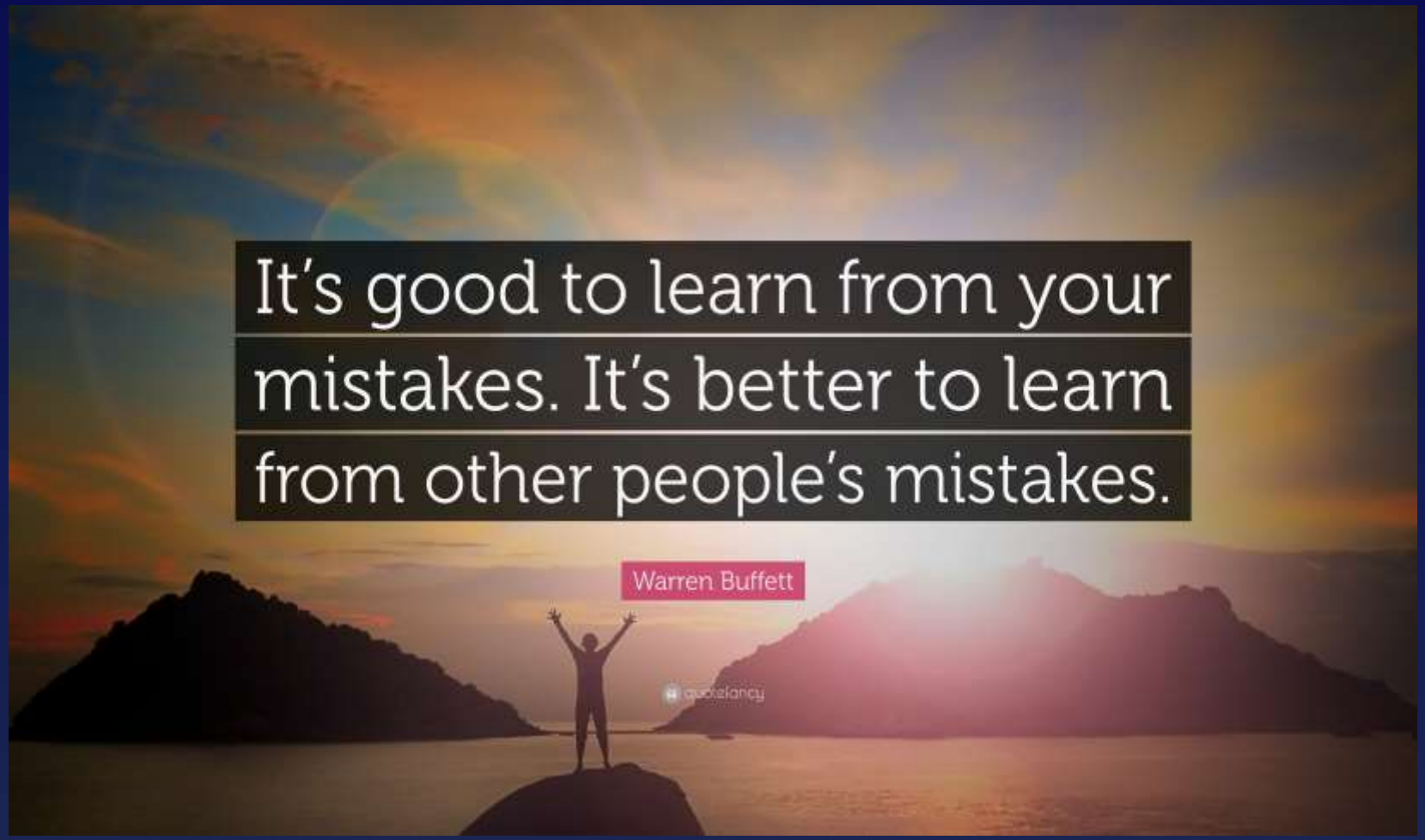
- Know different methods of withdrawal of dislodged hardware.

1. Intertwining of the wires
2. Snare
3. Small balloon dilation distal to the stent
4. Balloon dilatation in the stent
5. Entrapment technique
6. Crush the stent against the wall with another stent

Insert references here

Technical Tips And Message

- Contralateral femoral puncture and simultaneous wiring is a reasonable option , if vessel goes into threatened occlusion before retrieval of previous wire as previous wire will help in easy tracking down of additional wire.
- Sub acute stent thrombus need aggressive management.
- Try to analyze the cause of any complication to prevent it in the future.


It's good to learn from your mistakes. It's better to learn from other people's mistakes.
Warren Buffett
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