

CLINICAL NEGLIGENCE IN INTERVENTIONAL CARDIOLOGY

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MEDICINE AND THE LAW



CARDIOLOGISTS



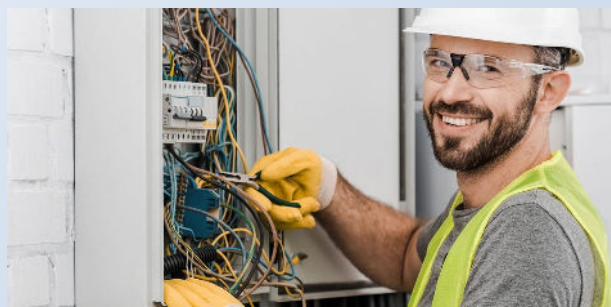
Angioplasty



Paediatrics



Structural intervention



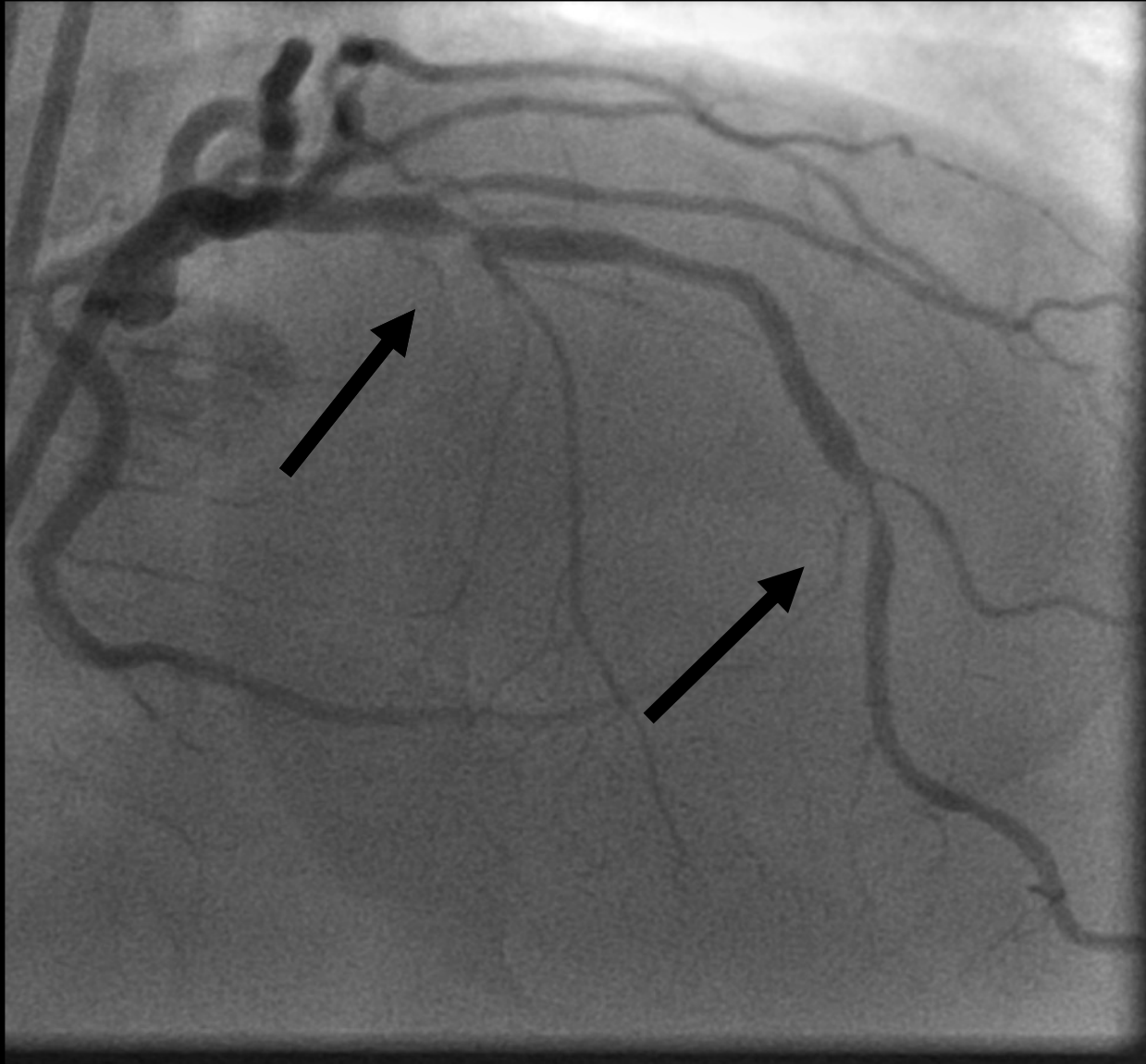
Pacing and electrophysiology

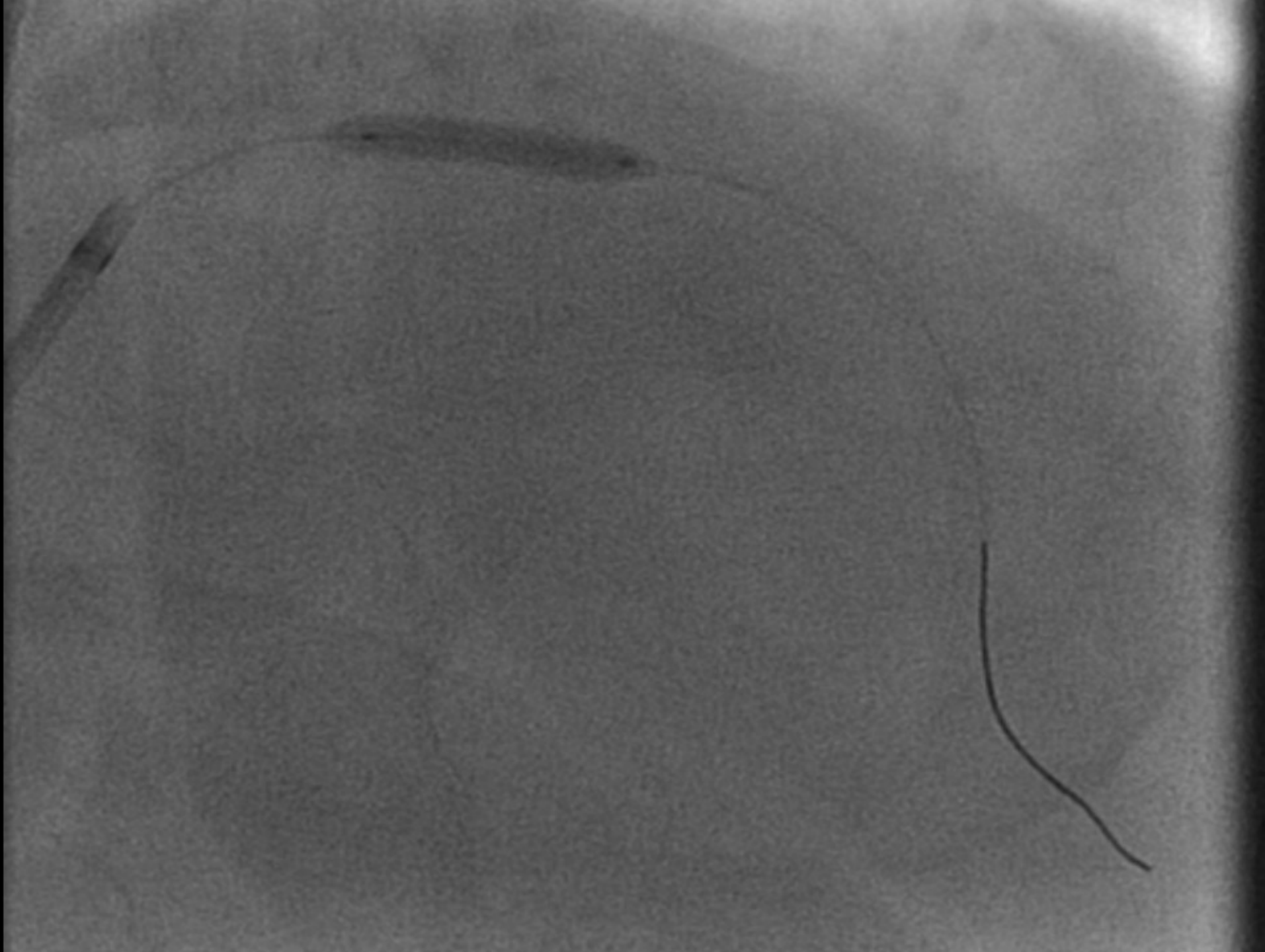


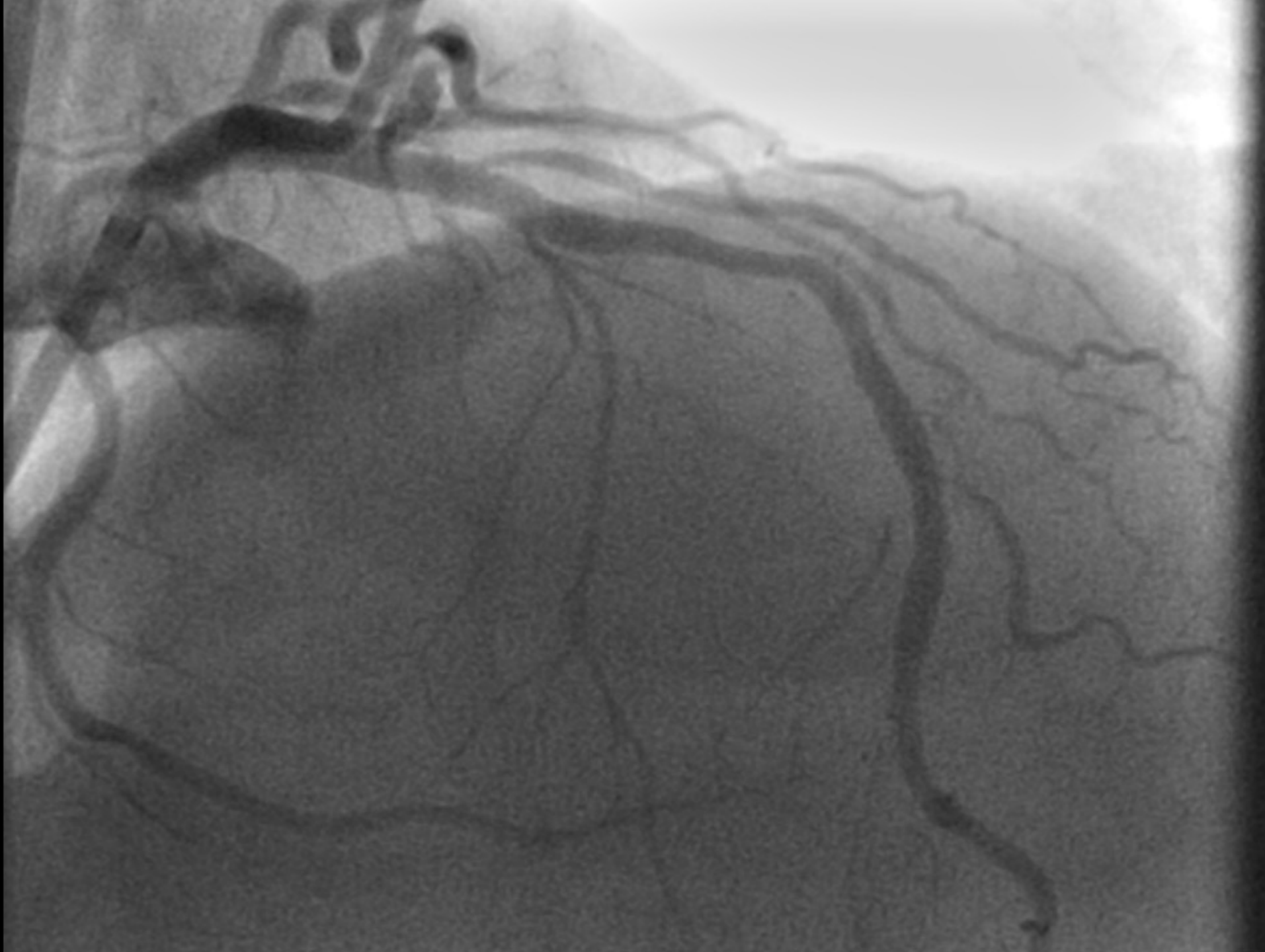
Imaging



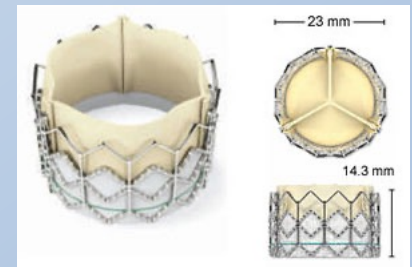
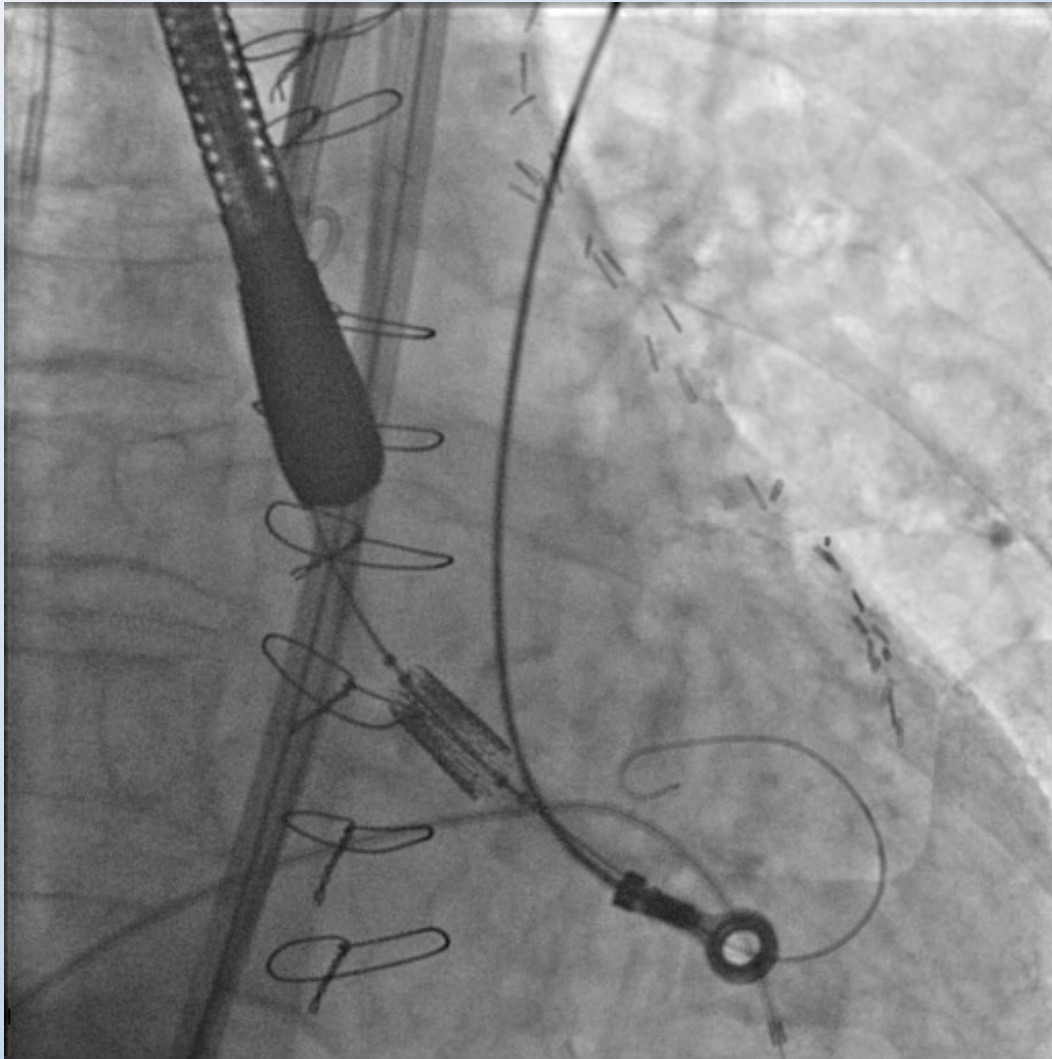
Grown Up Congenital Heart Disease







TRANSCATHETER AORTIC VALVE REPLACEMENT / IMPLANTATION (TAVR / TAVI)



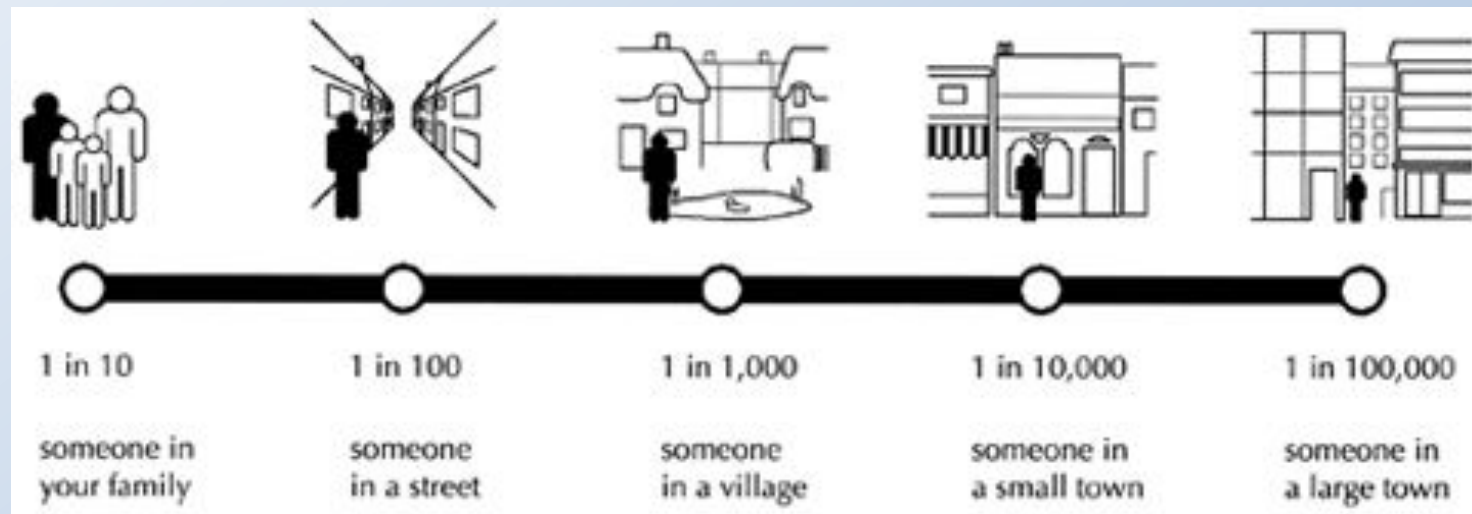


*“The doctor told me
it was 99% safe
How could it have
gone wrong?.....”*

2016 - ~ 2500 TRANSATLANTIC
FLIGHTS PER DAY



2013 estimate major
"hull loss" incidents
~ 1 in 2.4 m flights



Risks and Probability: The Royal College of Anaesthetists

*“Low risk
is not
no risk”*

WHEN THINGS GO WRONG IN CARDIOLOGY

Outcome is often

- Death
- Heart attack
- Stroke
- Reduced quality of life

WHAT GOES WRONG?

My experience

- ❖ Virtually always a failure in communication
- ❖ Missed / delayed diagnosis / delayed treatment (Relatively common)
- ❖ Procedural error (Relatively rare)
- ❖ Death on a waiting list
- ❖ Mis reading / misinterpretation of a test
 - Some cases are “toe-curling”

Example cases (All non-current)

CASE OF I

❖ Complication arising after a procedure

CASE OF I - BACKGROUND

- ❖ 61 Male admitted acute myocardial infarction (2011)
- ❖ Consent form signed
- ❖ Failed angioplasty to reopen right coronary artery
- ❖ In recovery 11:00 am (Time 0)

CASE OF I - BACKGROUND

- ❖ Nurses - Right sided weakness & confusion 11:30 (Time 30 min)
- ❖ 12:30 Intern - slight confusion squeezing with left hand ? Morphine – discussed with higher grade (90 min)
- ❖ 3:30 Resident review (4.5 hr)
 - Speech disturbance
 - Right sided facial and limb weakness

CASE OF I - BACKGROUND

❖ Neurological review

- Ischaemic left hemispheric stroke
- Too late for thrombolytic treatment
- Managed conservatively
- Discharged a few days late

CASE OF I - MY OPINION

- ❖ Generally poor note keeping (paper based)
- ❖ Cardiac catheterisation – mandated by guidelines
- ❖ Documentation of consent poor – abbreviations “MI” “CVA”
- ❖ Stroke is a recognised complication

CASE OF I – MY OPINION

- ❖ No procedural issues – technique & medication
- ❖ No attempt by nursing staff to alert senior staff
- ❖ Opportunities to treat stroke missed

CASE OF I – CONDITION & PROGNOSIS (2017)

- ❖ Before 2011 procedure, expectation of life 18 years to age 78
- ❖ Continuing angina
- ❖ Further myocardial infarction 2017
- ❖ Reluctant for further procedures
- ❖ 2017 expectation of life 5 – 7 yr – to age 72 – 74
- ❖ Significant neurological disability

CASE OF I – PERSONAL COST

- ❖ Electrician, sportsman, family man
- ❖ Unable to work since 2011
 - Slurred speech
 - Walked with stick

CASE OF I – INITIAL OUTCOME

- ❖ Defendant admitted breach of duty (2016)
- ❖ Accepted breach had contributed to incapacity

CASE OF I – MY OPINION

- ❖ Prompt recognition of stroke – probable thrombolytic treatment
 - Probable better neurological outcome
 - Probable more “aggressive approach” to underlying coronary disease
 - Probable better long term outcome

CASE OF I – OUTCOME

Late 2017
final settlement
reached

CASE 2

“Ah, Houston,
we've had
a problem”

CASE 2 BACKGROUND

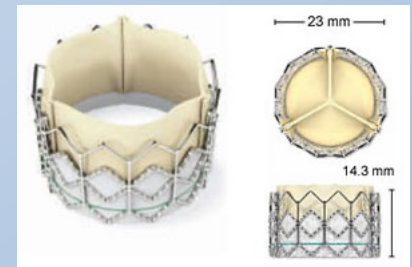
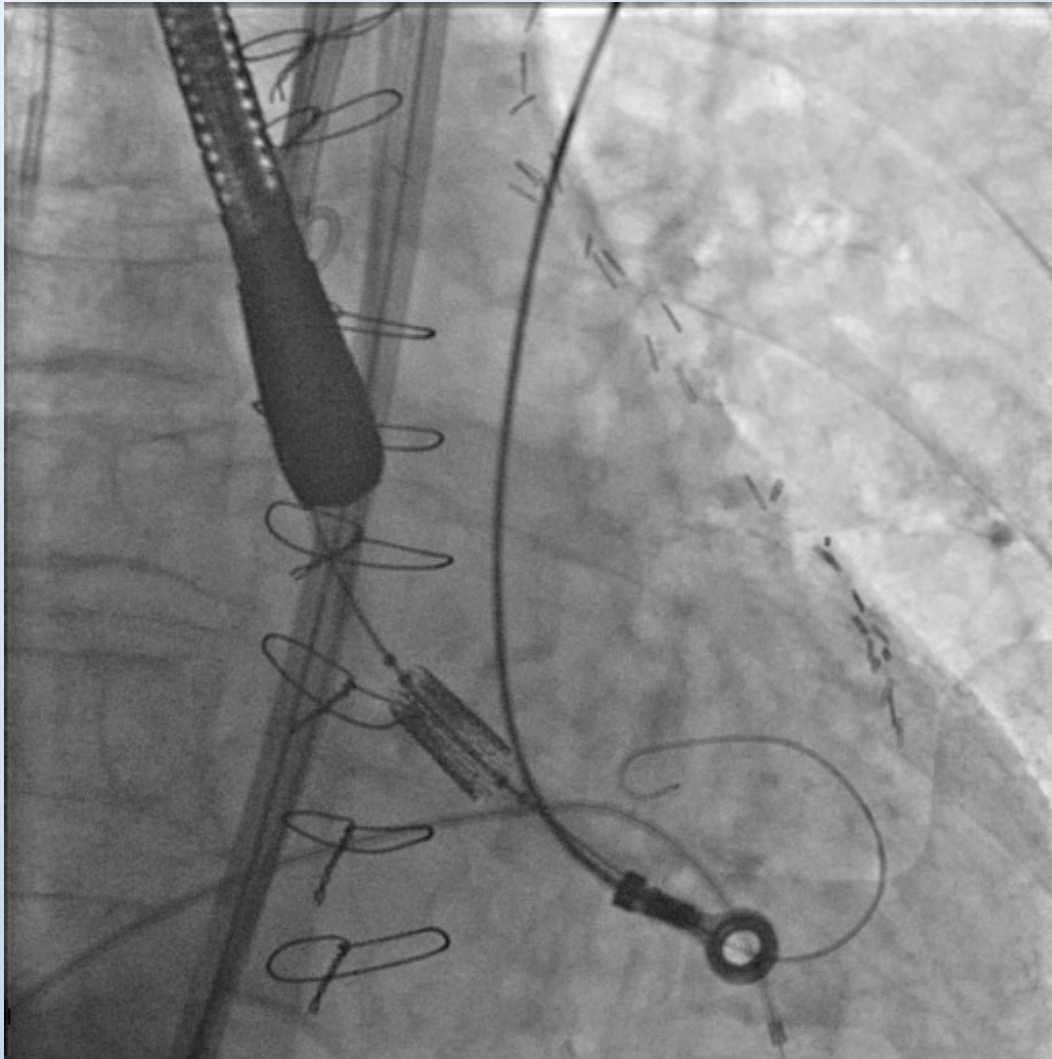
❖ Male 72

- Obese
- Very high alcohol intake
- Acute heart failure
 - Admitted to local hospital
 - ECHOCardiogram severe aortic stenosis
 - Impaired left ventricular function
 - Angiography normal coronary arteries

CASE 2

- ❖ Transferred to Regional Centre intensive care unit
- ❖ Discussed at multidisciplinary team meeting
- ❖ TAVI procedure

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CASE 2 – PROCEDURE

- ❖ Device embolisation to left ventricle
- ❖ Impossible to retrieve
- ❖ Immediate open heart surgery
 - Device retrieved
 - Aortic valve replaced
 - Discharged ~ 2 weeks later

CASE 2

- ❖ Consultant immediately apologised
- ❖ Consultant wrote full explanatory letter
- ❖ Hospital admitted liability
- ❖ 2 years post op normal left ventricular function

CASE 2 MY OPINION

- ❖ Management pre TAVI in line with cardiology practice and logical
- ❖ Management after error in line with best practice and logical
- ❖ Patient had good outcome
- ❖ Duty of candour completed

CASE 2 LIFE EXPECTANCY

- ❖ Incident age 72
- ❖ But for care and surgery unlikely have survived to hospital discharge
- ❖ Cohort life expectancy reduced from age 86.5y to 83 years (range 81 – 85)
- ❖ Outcome would have been the same if TAVI successful

CASE 2

What was
the value of the
claim ???

CASE 2 – THE CLAIM

Schedule of Loss

- £1256.92 (~ \$1600.00)
- Claim settled

CASE 3

Missed diagnosis & Unrealistic claimant expectations

CASE 3 BACKGROUND

❖ Deceased – 85 male – close family

- Obese

- Hypertension

- Type 2 diabetes

- Arthritis

- Endovascular repair of penetrating aortic ulcer with a stent

- 3 months before index event stent patent

CASE 3 INDEX EVENT

- ❖ Severe crushing chest pain
- ❖ Initial ECG (in retrospect acute Myocardial infarction)
- ❖ Primary angioplasty pathway not triggered
- ❖ Discussion – aortogram ordered
- ❖ No dissection
- ❖ Cardiac arrest and death prior to going to the cardiac catheterisation lab
- ❖ Post mortem severe coronary artery disease
- ❖ Negligence admitted

CASE 3 MY OPINION CONDITION AND PROGNOSIS

- ❖ Extensive myocardial infarction
 - Correct management – probable survival
 - But would have had significant cardiac damage
 - Expectation of life reduced from 5 y to to 2.5 y
 - Significant limitation of activities

CASE 3

❖ Family very unhappy

- Felt fit man
- Past stent did not increase risk of heart attack.
- Wanted to rewrite my opinion
- Discounted the co morbidities.
- Felt he could have acted as a nurse in dental practice and looked after grandson

CASE 3 CONCLUSION

- ❖ Settlement offered
- ❖ Multiple meetings with family
- ❖ Settlement accepted
- ❖ Case closed

CASE OF MRS T

CAUSATION & LIABILITY – FAILURE TO DISPENSE

- A TOE CURLER

- ❖ 11 November 2017 female, age 64
 - Acute myocardial infarction
 - Coronary angioplasty and stent
 - Echo - left ventricular ejection fraction 35% (normal 55 – 75%)
- ❖ Discharged 13 November
- ❖ Ticagrelor not dispensed

CASE OF T - BACKGROUND

❖ 4 days later

➤ Readmitted

➤ Further acute myocardial infarction

➤ Further angioplasty

➤ Second stent

CASE OF MRS T - BACKGROUND

❖ January 2018 – Hospital wrote to claimant

- Apologised
- Admitted discharged without ticagrelor
- Automated system – Pharmacist accidentally pushed "*at home*"
- Daughter had returned to collect the medication on 13 November

CASE OF MRS T – MY OPINION

- ❖ Initial care – Angioplasty – mandated by guideline
- ❖ Failure to ensure that Mrs T was discharged on 13 November with appropriate medications
- ❖ The pharmacist had pressed the incorrect button
- ❖ Mrs T had already gone home (agreed with ward)
- ❖ Daughter had gone back to collect the medication
- ❖ No evidence of a safety mechanism to ensure this
 - a. Checking medication with patient (*"At home" medications*)
 - b. Effect of the daughter collecting
 - c. No check to ensure correct that ticagrelor was at home

CASE OF MRS T – MY OPINION CONTINUED

- ❖ Failure to dispense ticagrelor on 13 November directly led to the second myocardial infarction and angioplasty 2 days post discharge
- ❖ Breach of duty of care
- ❖ Resulted in a reduced expectation of life
- ❖ Failure to arrange further ECHO & follow up after 2nd admission poor
- ❖ (Next reviewed 20 months later)

CASE OF MRS T – CONDITION AND PROGNOSIS

- ❖ Seen & examined
- ❖ Widow, had long standing fear of hospitals
- ❖ Very disturbed sleep
- ❖ Socially isolated
- ❖ Dependant for household tasks
- ❖ Felt life ruined by second admission

CASE OF MRS T - CLAIMANT

"I couldn't sleep. I couldn't eat, I was constantly on edge. I just sat on the bed rocking backwards and forwards saying I couldn't cope any more and I was very distressed."

CASE OF MRS T – MY OPINION

- ❖ First event reduced life expectancy by a third to 80 years
- ❖ Second event further reduced life expectancy by 2 years – to 78
- ❖ Long term medication not materially affected by second event
- ❖ I suggested formal psychological assessment

CASE OF MRS T – OUTCOME

Case settled

CONCLUSIONS

1. Interventional cardiology - a team specialty
2. Good communication essential
3. Clinical negligence most often missed / delayed diagnosis
4. Procedural errors relatively rare
5. Bad outcomes are disastrous