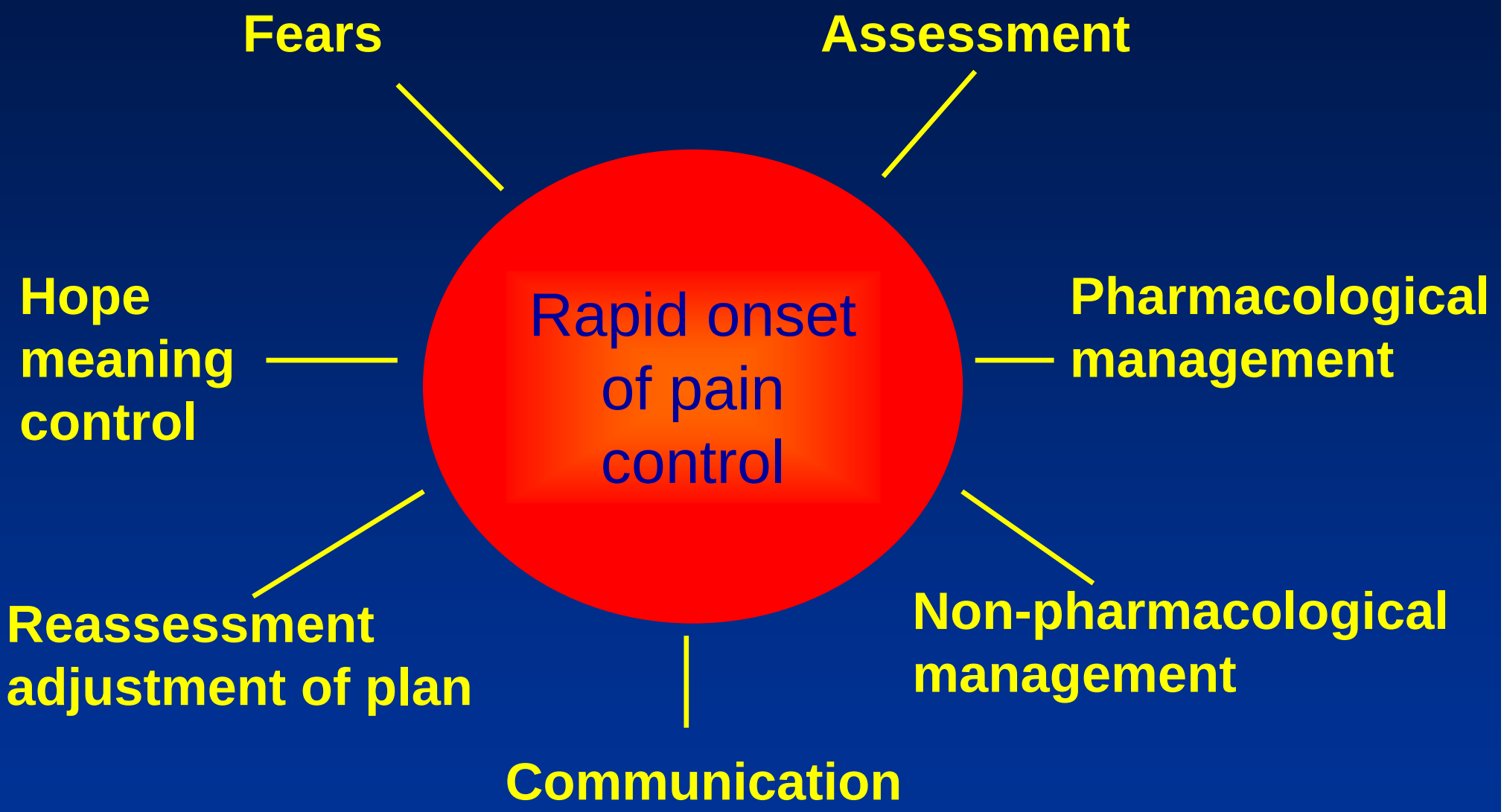
The role of titration for rapid onset of pain control

Professor Marie Fallon

St. Columba's Hospice Chair of Palliative Medicine

University of Edinburgh, UK


Fears
Assessment
Hope
meaning
control
Rapid onset
of pain
control
Pharmacological
management
Reassessment
adjustment of plan
Non-pharmacological
management
Communication

Opioid titration

Assessment:

- Patient
- Cause of pain
- Pain severity
- Drug history
- Organ dysfunction

Successful ingredients

- Communication
  - patient
  - carers/family
  - professionals
- Clarity regarding aims of situation
- Expectations with the opioid
- Correct route and dose

Fears

- Patients / carers / professionals
- Addiction / tolerance / side-effects
- Beginning of end

Reality

- Acute escalating pain
- ‘Chasing’ the pain
- Background medication can become irrelevant
- Early and frequent review are crucial

Normal release (NR) morphine

- Onset of action 20–30 minutes
- Peak drug level average 60 minutes
- Administer every 4 hours to maintain constant analgesic levels
- Steady plasma concentration within 12–15 hours (½ life of 1.5–4.5 hours)
- Full effect of any dose change assessed every 24 hours (or sooner if pain is more severe)
- No correlation between plasma levels and clinical effects of morphine

Expectations

If oral; NR morphine (Oramorph) aims are:

- Onset of action in 20–30 minutes
- Duration of action 4 hours

Modified release (MR) morphine

- Onset of action 1–2 hours
- Peak plasma concentration 3–6 hours
- Plasma concentrations maintained over 12–14 hours

Once-daily MR morphine:

Slower onset; peak at 8.5 hours

Titration with NR morphine

Step 3 naïve!

- 5–10 mg morphine PO every 4 hrs + ‘as required’

Already on Step 3:

- Can leave long-acting preparation and titrate with NR morphine to regain pain control

or

- Can include existing long-acting preparation in new NR morphine regimen

Case study

68-year-old man
(R) Pancoast's tumour

Stable on : MR morphine 30 mg every 12 hrs
Gabapentin 600 mg every 6 hrs
Diclofenac SR 75 mg every 12 hrs
NR morphine 10 mg 'as required'

Rapid, severe ↑ in pain due to local tumour progression

Pain score 1/10 x 3 months

Pain score now 9/10 x 3 days

NR morphine 10 mg brings pain to 7/10 after 1 hr

Edinburgh Pain Assessment Tool (EPAT©) VITAL SIGNS AND PAIN ASSESSMENT CHART

NHS Lothian

Ward **Consultant**

Surname	First Name	DOB	Unit No:

Date

Time

40^0

39^0 230 220

38^0 210 200

37^0 190 180

36^0 170 160

35^0 150 140

34^0 130 120

BP 110 100

90 80

Pulse 70 60

50 40

30 20

10

Resps

Sp02

Score worst pain since last assessment 0 = No pain 10 = Worst pain imaginable

PAIN 9 -10	
7 - 8	
5 - 6	
3 - 4	
1 - 2	
0	

X X X

5 – 10 = Severe pain (act)
Give analgesia. Regular review until score is less than 4
Use EPAT step 3

3 – 4 = Moderate pain (act)
Give analgesia
Use EPAT step 3

0 = No pain
1 – 2 = Mild pain

NAUSEA SCORE

Nausea Score: 0 = No nausea 1 = Nausea (act) 2 = Vomiting (act) 3 = Nausea & vomiting (act)

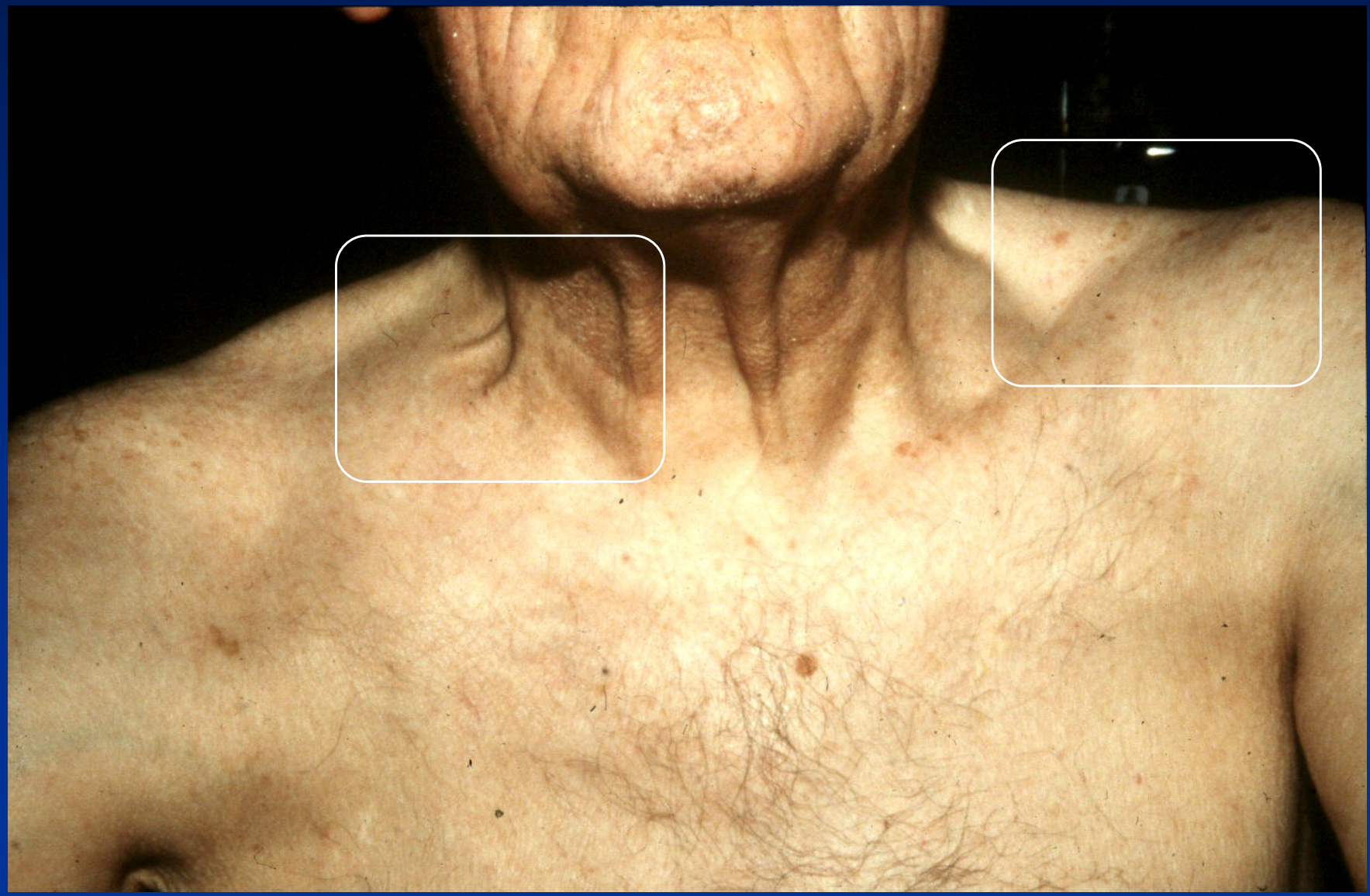
Weight

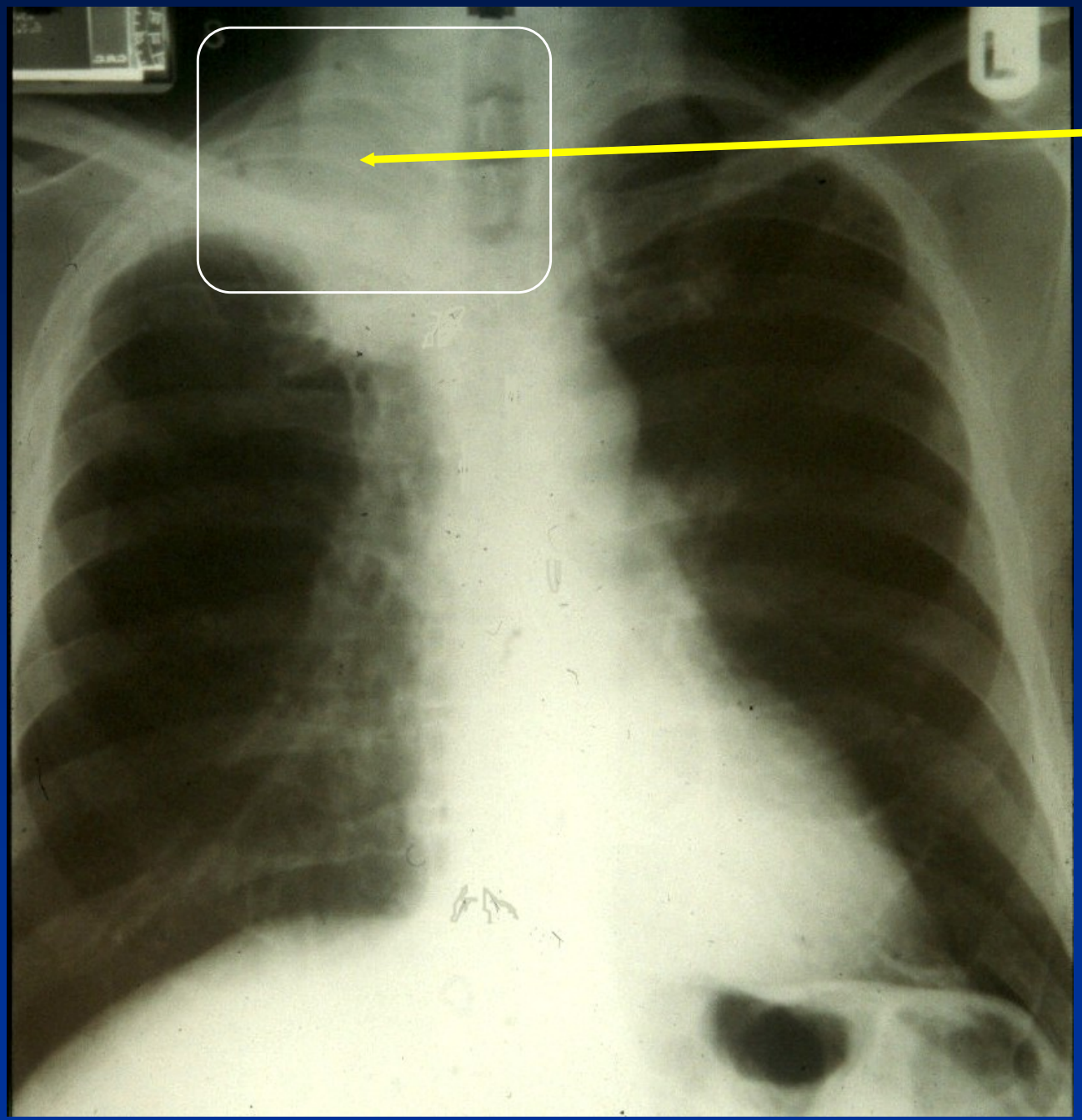
Bowels

Other

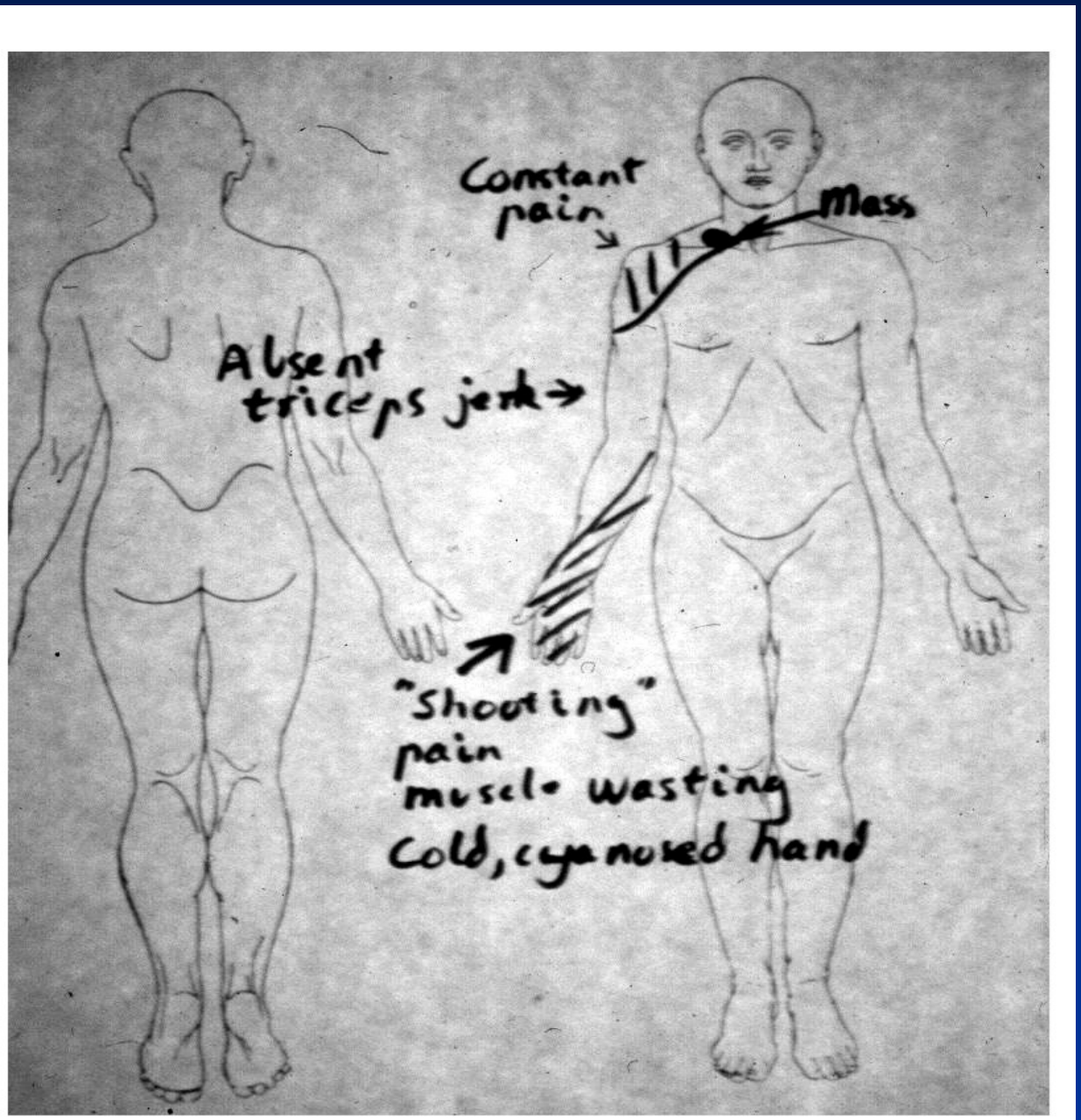
.....

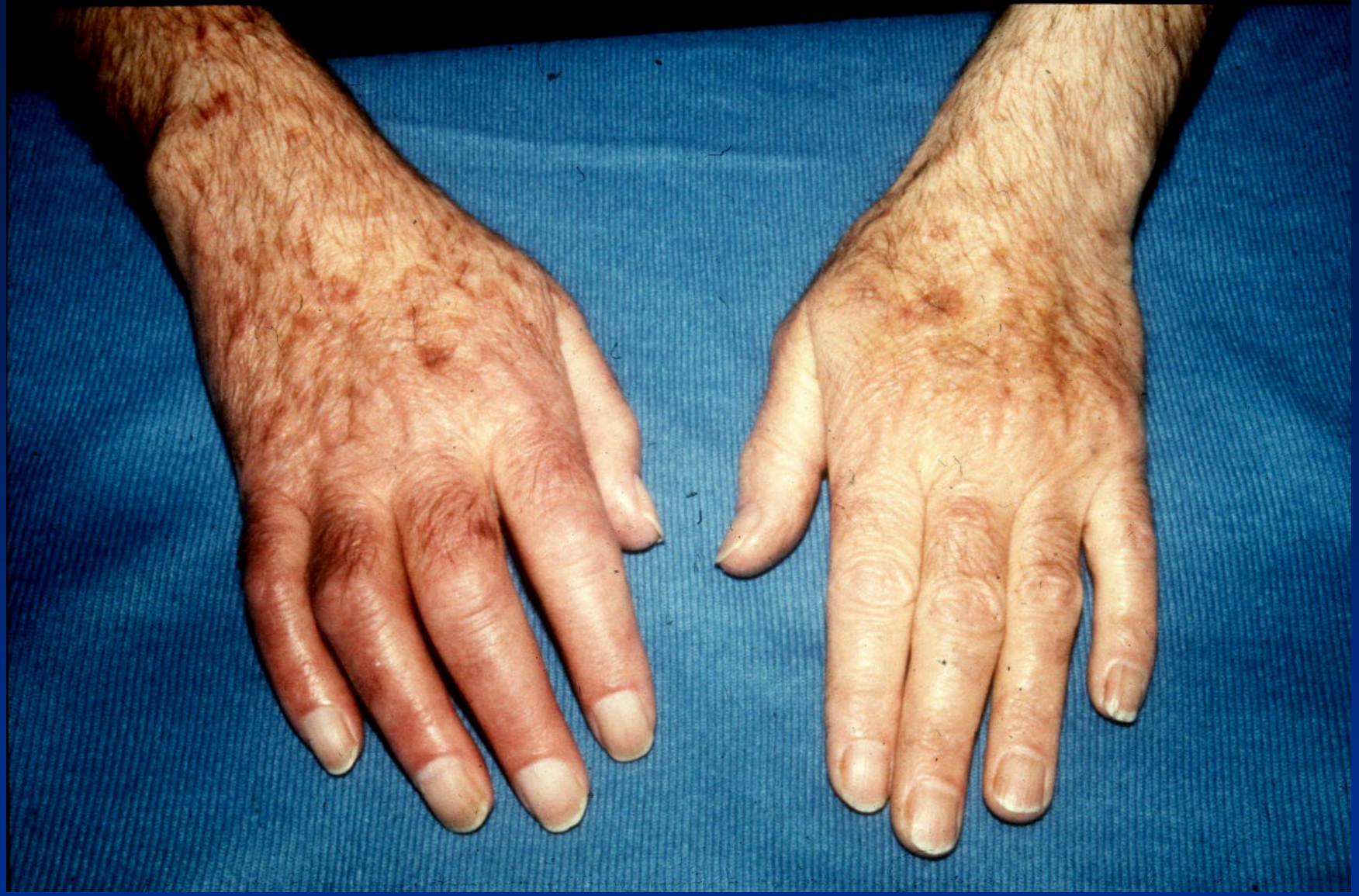
Pancoast's tumour




Pancoast's tumour

Pain diagram





- Oedema and colour changes
- Trophic changes
- Muscle wasting

What do we do now?

- Pain is mostly in (R) upper chest/shoulder
- No opioid side-effects
- Pain reduces from 9 to 7 after 1 hr following 10 mg NR morphine
- Uses extra 6 doses of the NR morphine per 24 hours

Options

1. Leave MR morphine and titrate with NR morphine (e.g. ↑ MR morphine to 60 mg every 12 hrs with 20 mg ‘as required’ and re-titrate on daily basis)

2. Stop MR morphine and titrate exclusively with NR morphine every 4 hrs (e.g. 20 mg every 4 hrs + 20 mg ‘as required’)

Clear advantages regarding timescale, efficiency and outcomes

versus

Some practical considerations in some patients