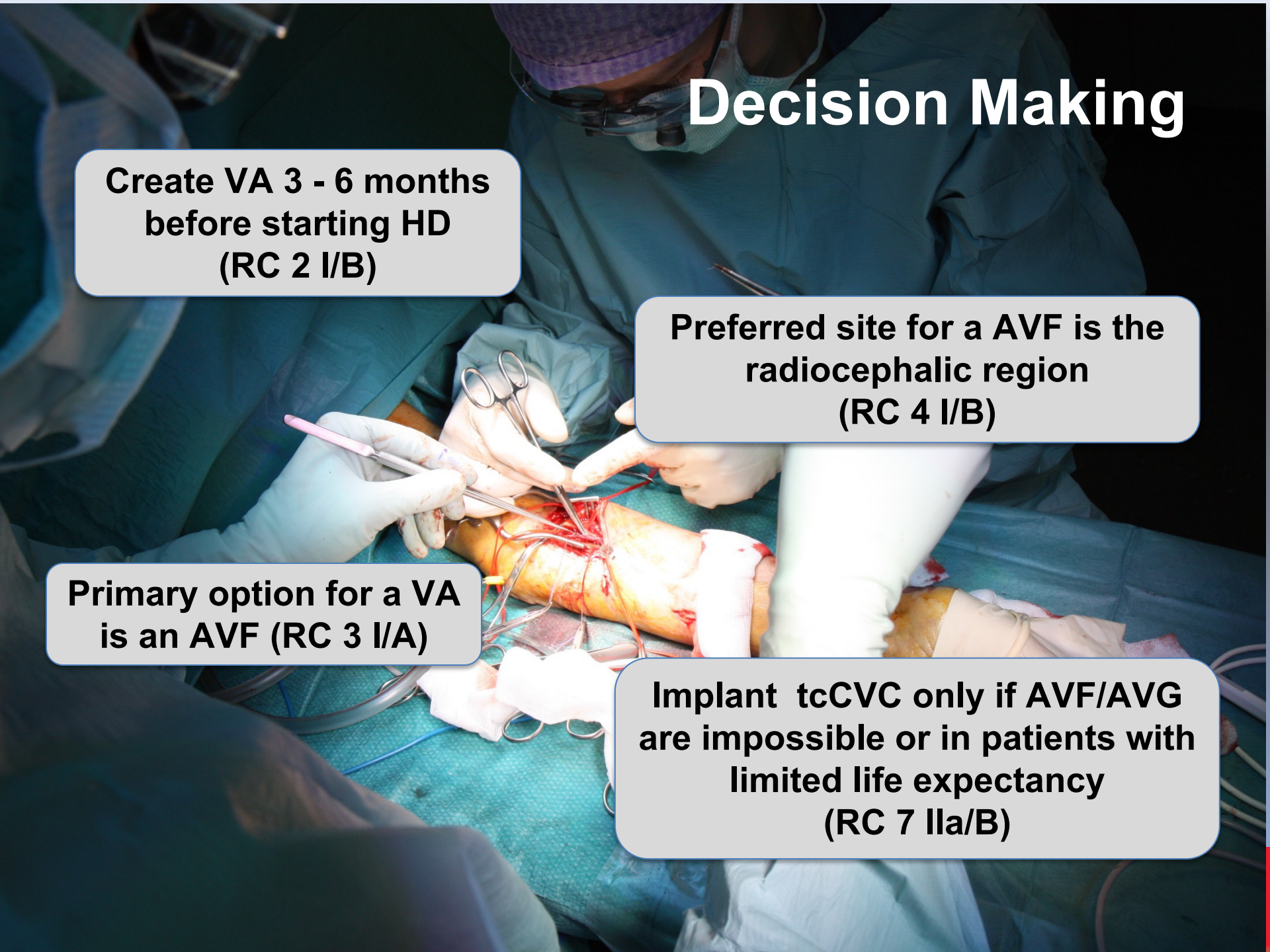


Decision Making

A close-up photograph of a surgeon performing a vascular surgery on a patient's arm. The surgeon is wearing a blue surgical cap, glasses, and a mask. The patient's arm is exposed, and the surgeon is using surgical instruments to work on the blood vessels. The background is a sterile operating room environment.

**Create VA 3 - 6 months
before starting HD
(RC 2 I/B)**

**Preferred site for a AVF is the
radiocephalic region
(RC 4 I/B)**

**Primary option for a VA
is an AVF (RC 3 I/A)**

**Implant tcCVC only if AVF/AVG
are impossible or in patients with
limited life expectancy
(RC 7 IIa/B)**

VA Imaging

Assess veins and arteries by DUS prior to access creation (RC 8 I/A)

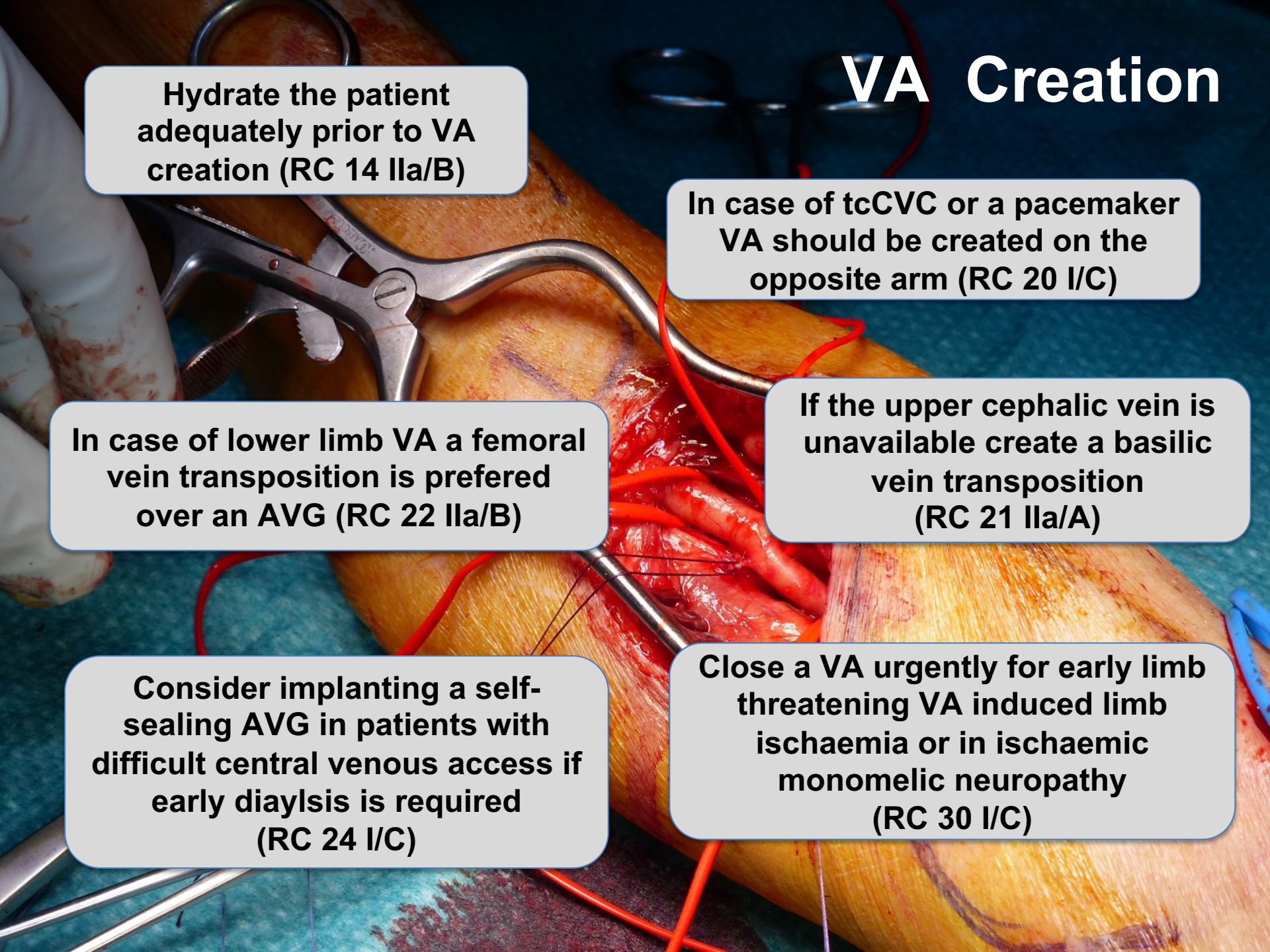
Use DUS in case of suspected VA dysfunction (RC 9 I/A)

Use CTA in case of inconclusive DUS results to evaluate the degree of central venous stenosis (RC 10 IIb/C)

Angiography is recommended only in VA patients with VA dysfunction with expected subsequent intervention (RC 12 I/C)

Contrast enhanced MRA is not recommended in ESRD patients due to gadolinium associated nephrogenic systemic fibrosis (R11 III/C)

VA Creation



Hydrate the patient adequately prior to VA creation (RC 14 IIa/B)

In case of tcCVC or a pacemaker VA should be created on the opposite arm (RC 20 I/C)

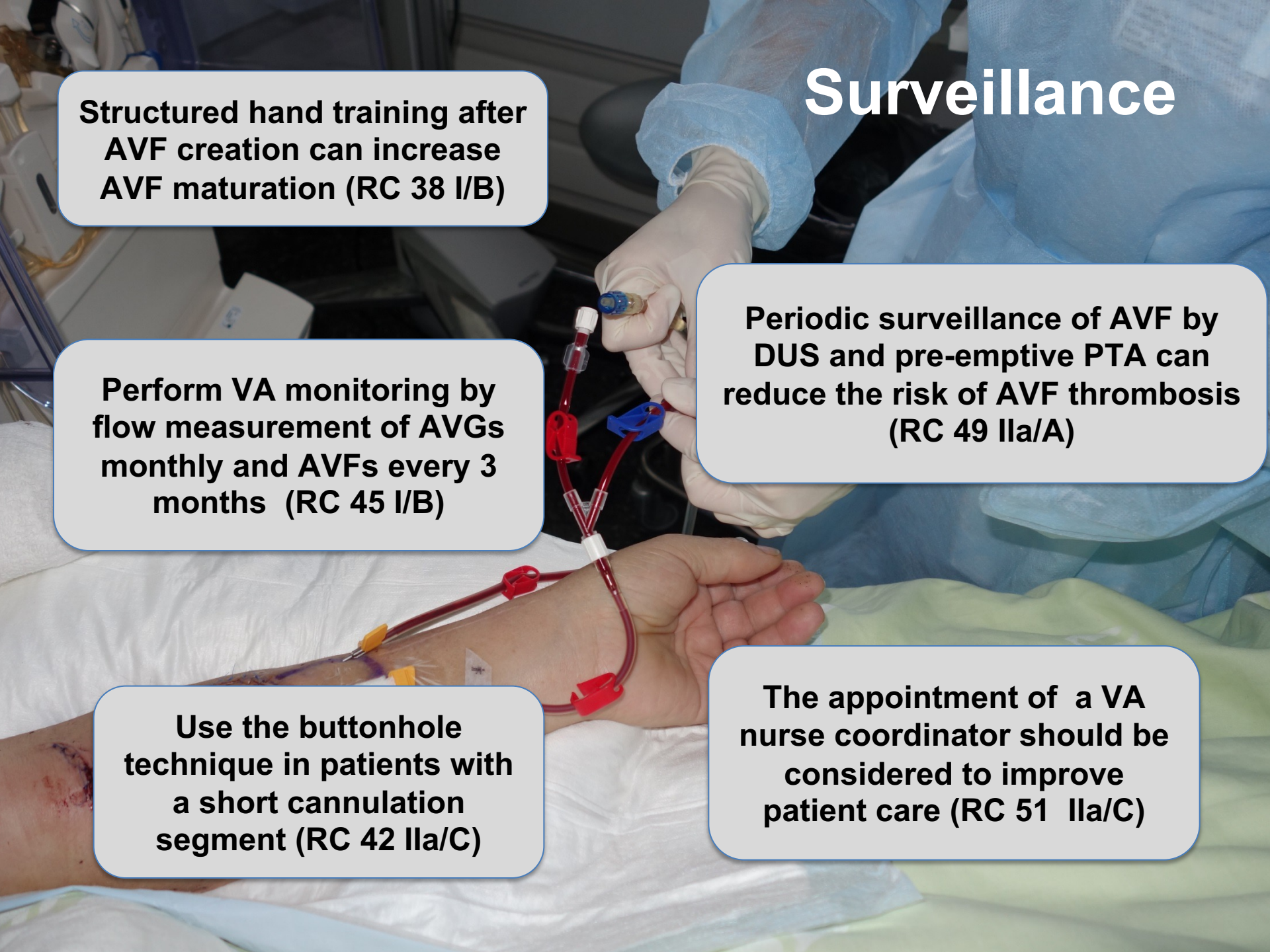
In case of lower limb VA a femoral vein transposition is preferred over an AVG (RC 22 IIa/B)

If the upper cephalic vein is unavailable create a basilic vein transposition (RC 21 IIa/A)

Consider implanting a self-sealing AVG in patients with difficult central venous access if early dialysis is required (RC 24 I/C)

Close a VA urgently for early limb threatening VA induced limb ischaemia or in ischaemic monomelic neuropathy (RC 30 I/C)

Surveillance



Structured hand training after AVF creation can increase AVF maturation (RC 38 I/B)

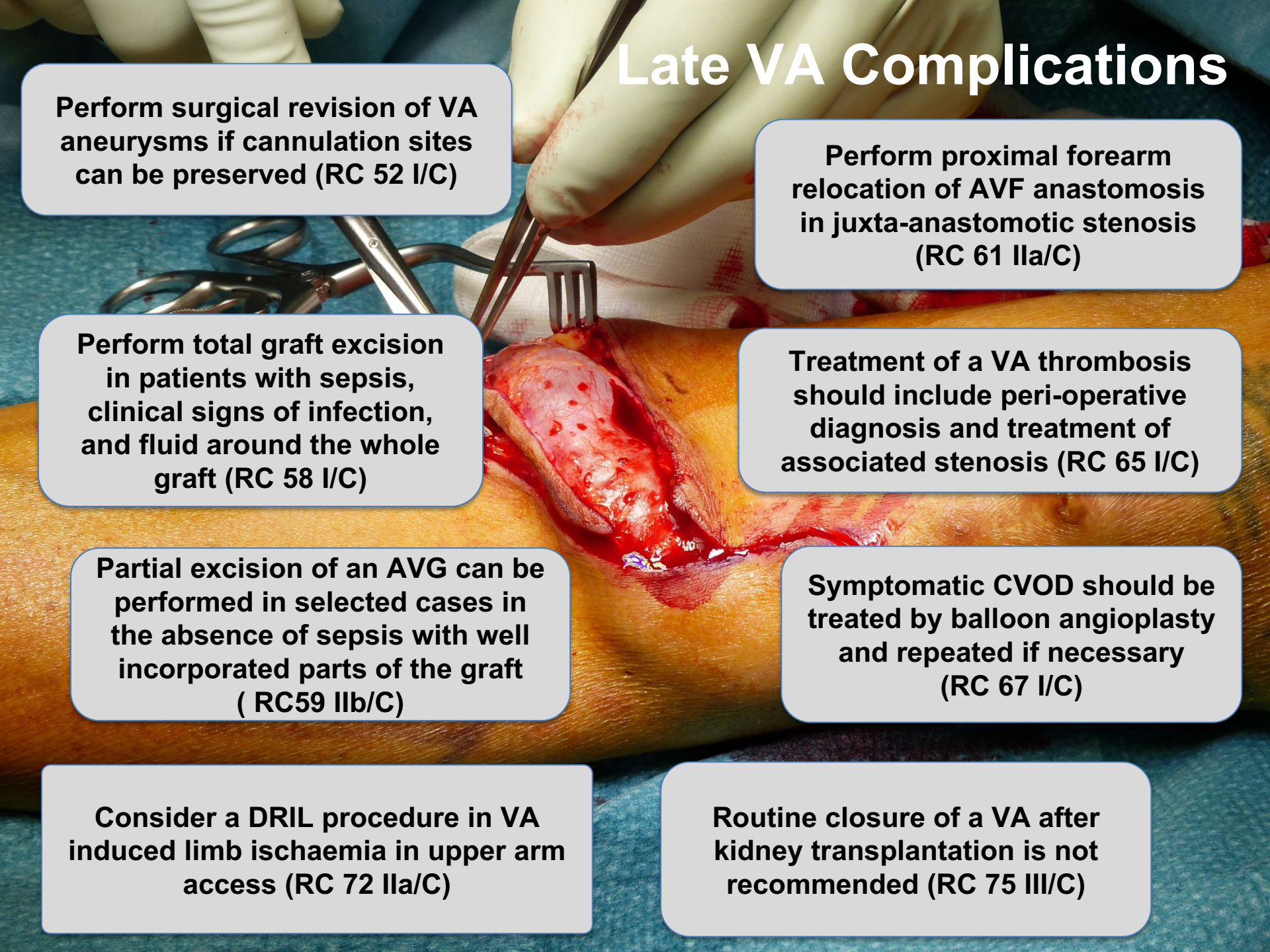
Perform VA monitoring by flow measurement of AVGs monthly and AVFs every 3 months (RC 45 I/B)

Periodic surveillance of AVF by DUS and pre-emptive PTA can reduce the risk of AVF thrombosis (RC 49 IIa/A)

Use the buttonhole technique in patients with a short cannulation segment (RC 42 IIa/C)

The appointment of a VA nurse coordinator should be considered to improve patient care (RC 51 IIa/C)

Late VA Complications



Perform surgical revision of VA aneurysms if cannulation sites can be preserved (RC 52 I/C)

Perform proximal forearm relocation of AVF anastomosis in juxta-anastomotic stenosis (RC 61 IIa/C)

Perform total graft excision in patients with sepsis, clinical signs of infection, and fluid around the whole graft (RC 58 I/C)

Treatment of a VA thrombosis should include peri-operative diagnosis and treatment of associated stenosis (RC 65 I/C)

Partial excision of an AVG can be performed in selected cases in the absence of sepsis with well incorporated parts of the graft (RC 59 IIb/C)

Symptomatic CVOD should be treated by balloon angioplasty and repeated if necessary (RC 67 I/C)

Consider a DRIL procedure in VA induced limb ischaemia in upper arm access (RC 72 IIa/C)

Routine closure of a VA after kidney transplantation is not recommended (RC 75 III/C)