Pro AVF = con CDK

LÁSZLÓ KOSZTYU
ACCESSANSVARIG KÄRLKIRURG
REGION GÄVLEBORG

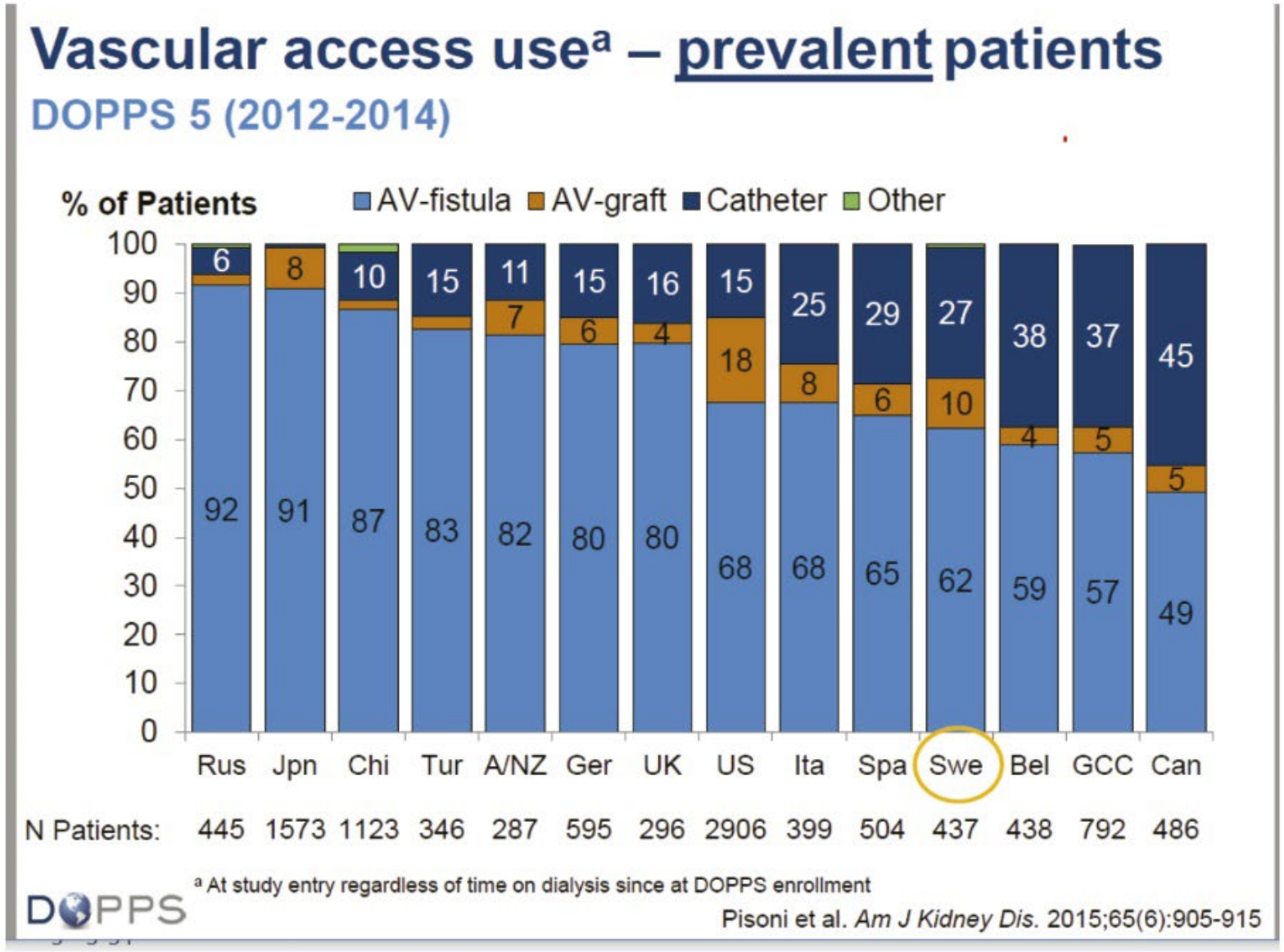


Fig 3. DOPPS-data fördelat på länder, typ av access AV-fistel, AV-graft, CDK eller övrig access bland prevalenta patienter i hemodialys, andel (%) 2012–2014.

CDK first

ökad risk för central stenos

negativ påverkan på blivande AV-fistel/AV-graft operation

Complications of central venous catheterization

Immediate
Bleeding
Arterial puncture
Arrhythmia
Air embolism
Thoracic duct injury (with left SC or left IJ approach)
Catheter malposition
Pneumothorax or hemothorax
Delayed
Infection
Venous thrombosis, pulmonary emboli
Venous stenosis
Catheter malfunction
Catheter migration
Catheter embolization
Myocardial perforation
Nerve injury

SC: subclavian; IJ: internal jugular.

UpToDate®

CDK & infektion

- In one study of 472 patients who had newly placed tunneled hemodialysis catheters, CRBSIs occurred in 35 percent by three months and 54 percent by six months.
- The incidence of bacteremia is approximately 10-fold higher in patients with tunneled catheters compared with patients who have either arteriovenous (AV) fistulas or grafts. In addition, catheter-dependent hemodialysis patients have a two- to threefold higher risk of infection-related hospitalization and infection-related death compared with patients undergoing hemodialysis via an AV fistula or graft.

CDK & infektion

- Hemodialysis CRBSIs can lead to metastatic complications such as osteomyelitis, endocarditis, septic arthritis, or epidural abscess. Metastatic infections have been observed in approximately 5 to 10 percent of catheter-dependent hemodialysis patients. The increased frequency of catheter use has led to more frequent metastatic infections.
- The most important risk factor for tunneled CRBSIs is prolonged use of the catheter.

AVF/AVG infektion vs CDK infektion

- AVF infektions rata: 0,2-0,4/1000 fistula-dagar (enl literatur högre med BH teknik)
- AVG infektions rata: 1-2/1000 fistula-dagar
- CDK infektions rata: 0,6-6,5/1000 CDK-dagar
- **SNR**

CDK & central stenos

- The most important risk factor for tunneled CRBSIs is prolonged use of the catheter.
- The incidence is variable and is reported to occur in 20 to 40 percent of patients with chronic catheters, but is likely under-reported, since many patients are asymptomatic.

CDK & DVT

- Catheter-related venous thrombosis is a common complication of indwelling central venous catheters and is estimated to contribute to 10 percent of all deep vein thromboses (DVT) in adults.

CDK & dissfunktion

- Minskning av flöde under 300ml/min
- Orsak:
  - mekanisk (t.ex. kinking)
  - trombotisk (t.ex. fibrinstrumpa)

AVF & neurologiska påverkningar

- Perif nerv påverkan orsakad av operation: brukar försvinna inom ca 4-6 v postoperativt
- Carpal tunnel: högre incidens än hos ”vanlig” befolkning (upp till 9%)
- Direkt nerv påverkan av fistel (”svirr orsakad”, ofta kräver operativ friläggning av nerv)
- Ischemic Monomelic Neuropathy (IMN) => infarkt av vasa nervosa, tidigt efter operation, kräver offtast nedläggning av AVF

AVF & steal/aneurysm

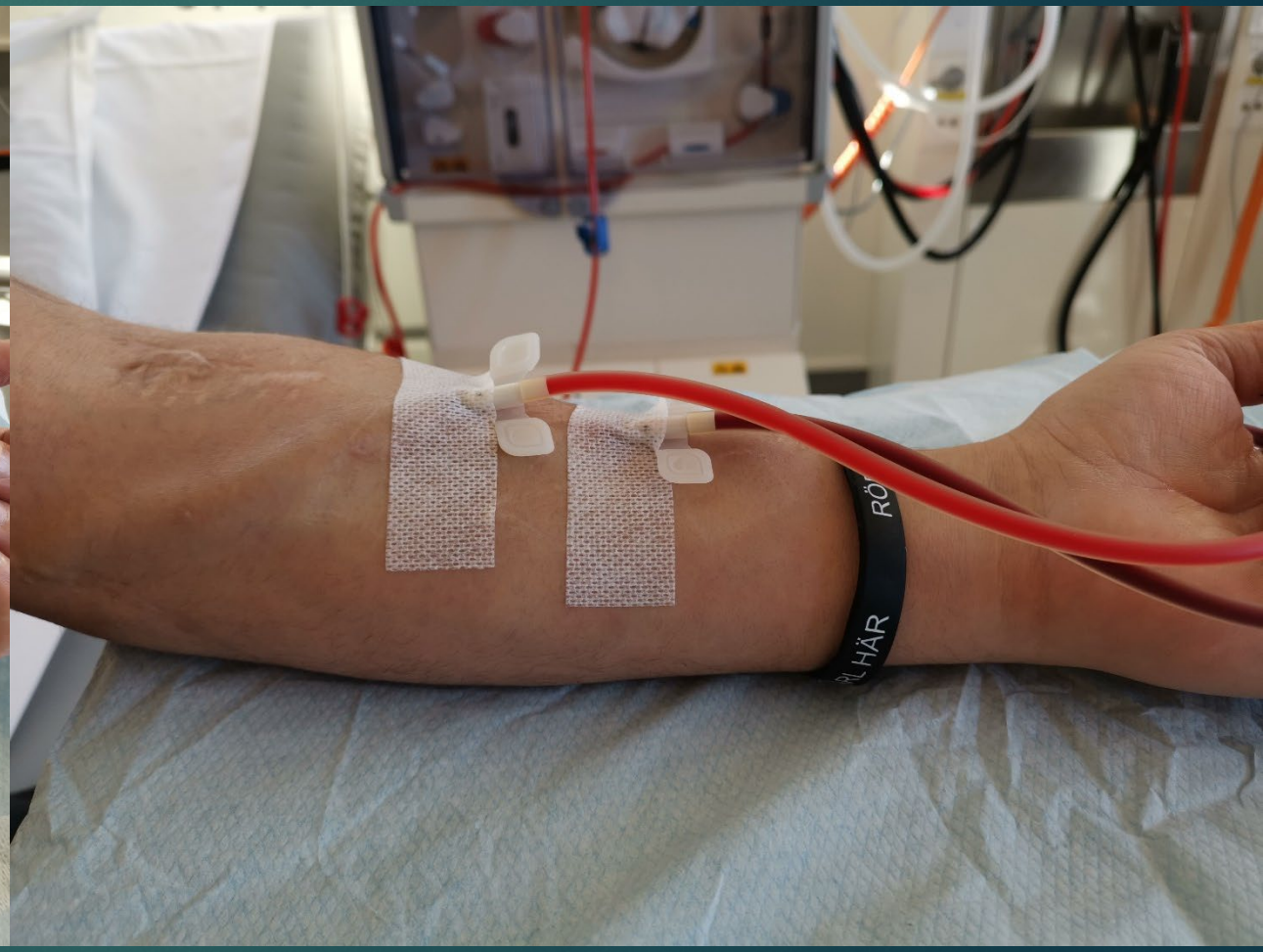
- Symptomgivande steal
  - RC -> 0,25% - 1,8%
  - BC/BB -> 4% - 9%

- Aneurysm
  - Incidens: 0% - 10%
  - Oftast teknikberoende (BH är bäst)

literatur

- UpToDate!
- Arteriovenous Access (Infection, Neuropathy, and Other Complications) Can J Kidney Health Dis. 2016; 3:2054358116669127

Region Gävleborg



slutsatser

AV[illegible]IRST

CD[illegible]IRST

Rätt patient

Rätt access

I rätt tid

På rätt ställe/sjukhus

Av rätt operatör

PATIENT FIRST