Advances in the management of renal ischaemic foot in diabetic patients on dialysis

Michael Edmonds
King’s College Hospital London
Disclosure

Speaker name:
Michael Edmonds

I have the following potential conflicts of interest to report:

- [x] Consulting
- [ ] Employment in industry
- [ ] Stockholder of a healthcare company
- [ ] Owner of a healthcare company
- [ ] Other(s)

- [ ] I do not have any potential conflict of interest
Disclosures

Urgo

Crawford
If these patients are treated early by a strict multidisciplinary protocol in a dedicated diabetic foot clinic

Revascularisation

- Angioplasty
- Arterial bypass
- Wound care

Good outcomes can be achieved
Diabetic Foot Clinic

- Co-ordinate primary and secondary care
- Wound care/orthotics/plasters
- Emergency referrals
- Vascular diabetic clinics
- Orthopaedic diabetic clinics
- Education / Research
- Charcot foot clinics
- Post operative reviews and follow ups
- Debridement/ minor surgery
- Outpatient antibiotic service
Diabetic Foot Team

- Podiatrist
- Nurse
- Orthotist
- Surgeon
- Radiologist
- Diabetologist
Patients

26 diabetic patients on haemodialysis
Peripheral vascular disease

28 lower limbs presenting with necrosis
Forefoot
Heel
Protocol

- Early revascularisation
  - Angioplasty
  - Arterial bypass
- Aggressive control of infection
- Early debridement and minor amputation
- Negative wound pressure therapy
- Wound closure-split skin graft
Outcomes at 1 year

- Patients: 26
- Limbs: 28
- Major amputations: 2
- Limb survival: 26/28
- 30 day patient survival: 25/26
- Deaths at 1 year: 8
- 1 Year amputation free survival: 17/26
Revascularisation

• Primary angioplasty 18

• Angioplasty followed by bypass 5

• Primary bypass 5
Primary angioplasty

• Limbs 18
• Major amputations 1
• Limb survival 17/18
• 30 day patient survival 17/18
• Deaths at 1 year 5
• 1 year amputation free survival 13/18
Angioplasty and bypass

- Limbs: 5
- Major amputations: 0
- Limb survival: 5/5
- 30 day patient survival: 5/5
- Deaths at 1 year: 1
- Salvage angioplasty: 2
- 1 Year amputation free survival: 4/5
Angioplasty and bypass

- SFA angioplasty and distal bypass  2
  - Pop-DP x 2
- Limited clinical response to distal angioplasty  2
  - Pop-ATA
  - SFA-ATA
- SFA angioplasty and CFA endarterectomy  1
Primary bypass

- Limbs 5
- Major amputations 1
- Limb survival 4/5
- 30 day patient survival 5/5
- Deaths at 1 year 2
- 1 Year amputation free survival 2/5
Primary bypass

- Extensive tissue loss 3
  - Pop-DP x2
  - POP-ATA
- Blocked graft 1
  - CFA endarterectomy and CFA-Per
- Threatened graft 1
  - Occluded SFA inflow to distal graft
    CFA-ATA
Protocol

• Early revascularisation
  • Angioplasty
  • Arterial bypass
• Aggressive control of infection
• Early debridement and minor amputation
• Negative wound pressure therapy
• Wound closure-split skin graft
Infected necrosis forefoot
Transmetatarsal amputation
LSV harvested from left leg
- cephalic vein femoris
- Composite graft - good veins

PROCEDURE
- SFA endarterectomy
- Reversed LSV
- Gt. pulse
- R. ankle vein
- 7th pulse

CLOSURE

DRAINS

PODS

Excellent signal and bleeding
PUL

20 Weeks
Conclusion

When dialysis patients with necrosis are treated early by a strict multidisciplinary protocol in a dedicated diabetic foot clinic

• Revascularisation
  • Angioplasty
  • Arterial bypass
• Wound care

Limb salvage can be achieved in most patients
CONCLUSION

• Many diabetic renal feet in dialysis patients CAN be saved
Primary angioplasty
Incision

Findings
LSV harvested from E (left leg)
○ cephalic vein forearm
Composite graft - good veins

Procedure
SFA endarterectomy

2 reversed LSV
2 GIA probes
2 varicose
No pulse

Closure

Drains

Reduction in pain after procedure
Maloti disciplinary approach
Revascularisation

• Primary Angioplasty 16

• Angioplasty and then bypass 5

• Primary bypass 6
Primary Angioplasty

- 30 day survival 15/16
- Limb survival at one year (or at death) 15/16
- Amputation free survival at 1 year 12/16
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