# Rutherford 5 Clinical Case

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### A Rutherford 5 patient

- 72-year-old male
- Type 2 DM, 25 yrs
- Insulin therapy 10 yrs
- CAD (AMI 2007)
- Hypertension

#### Presentation

- The patient, after a long walk, noticed a dark spot on the sock of the left foot
- He found a superficial ulcer in the heel region of the left foot with surrounding cellulitis
- The patient went to GP who suggested local antibiotic therapy
- After 1 week the GP referred to our Diabetic Foot Clinic for a deep, infected ulcer of the heel



#### Clinical characteristics

- Painless ulcer
- Femoral and popliteal pulse present
- Pedal pulses absent
- TcP0<sub>2</sub> 28 mmHg
- 12,000 white blood cells count

### Diagnosis

## Deep infected ischemic ulcer -> RTF 5/TUC IID

Rutherford						
Grade	Category	Clinical				
0	0	Asymptomatic				
I	1	Mild claudication				
I	2	Moderate claudication				
I	3	Severe claudication				
II	4	Ischemic rest				
III	5	Minor tissue loss				
		Diajor doone loos				

University of Texas Wound Classification System		Grade			
		0 Pre or post ulcerative lesion completely epithelialized	Superficial wound,	II Wound penetrating to tendon or capsule	III Wound penetrating to bone or joint
Stage	A No infection or ischemia	0A	IA	IIA	IIIA
	B Infection present	0В	IB	IIB	IIIB
	C Ischemia present	0C	IC	IIC	IIIC
	D Infection and ischemia present	0D	ID	IID	IIID

1°

#### Infection treatment

- Ulcer debridement
- Urgent surgery for gangrene, abscess, phlegmon
- Identification of bacterial strains → appropriate antimicrobial therapy

**2**°

#### Urgent medical therapy

- Metabolic balance
- Anemia correction
- Heart evaluation
- Pre-medications:
  - Double anti-PLTs therapy
  - Renal protection

3°

#### Revascularization

PTA/Bypass are not the first-line theraphy in Texas D wounds

4°

#### nal treatment

- Medical
- Surgical
- Orthopedic
- Rehabilitation



## Before and after debridement





1°

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#### **Final treatment**

- Medical
- Surgical
- Orthopedic
- Rehabilitation

1°

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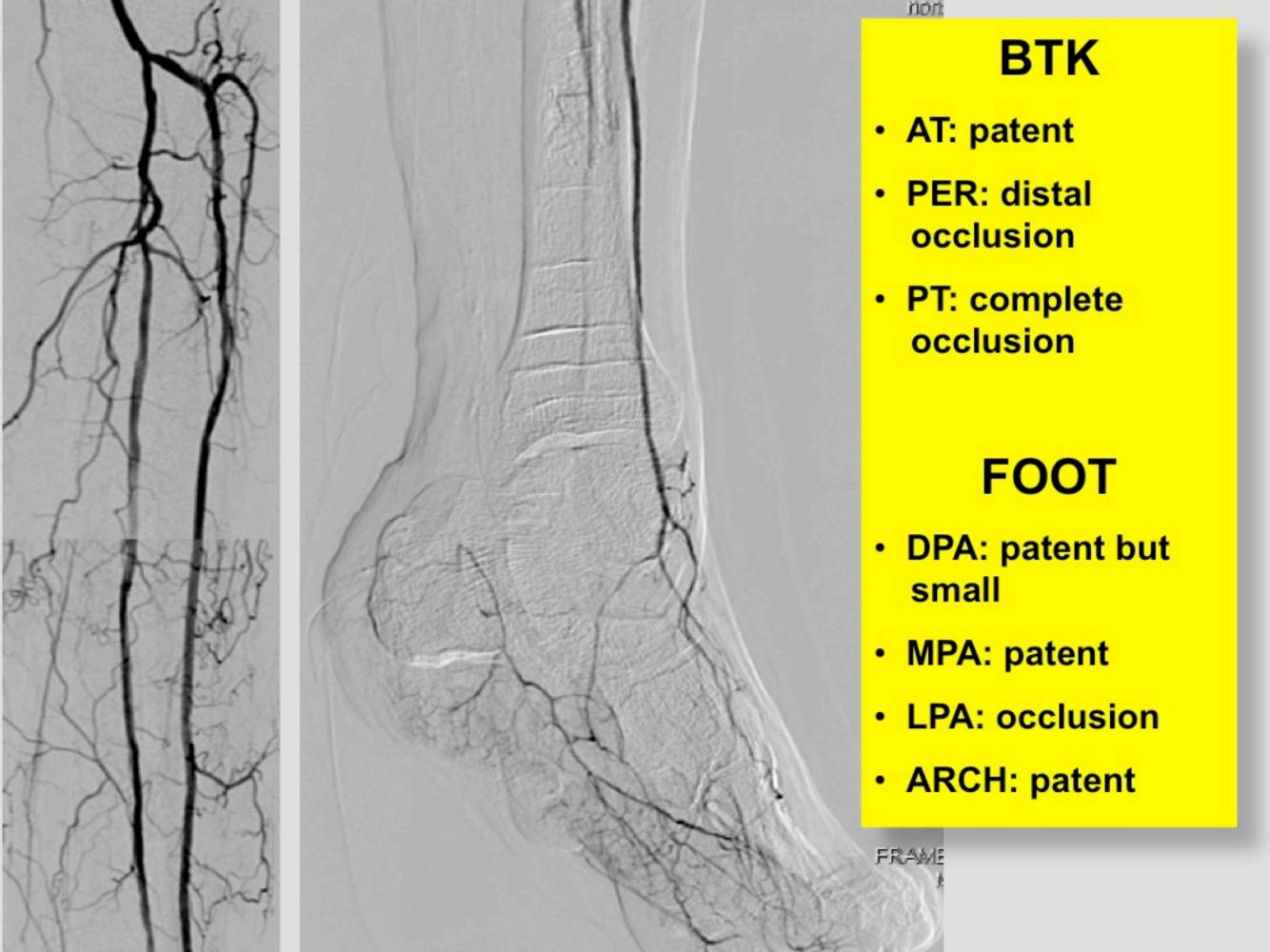
#### **Final treatment**

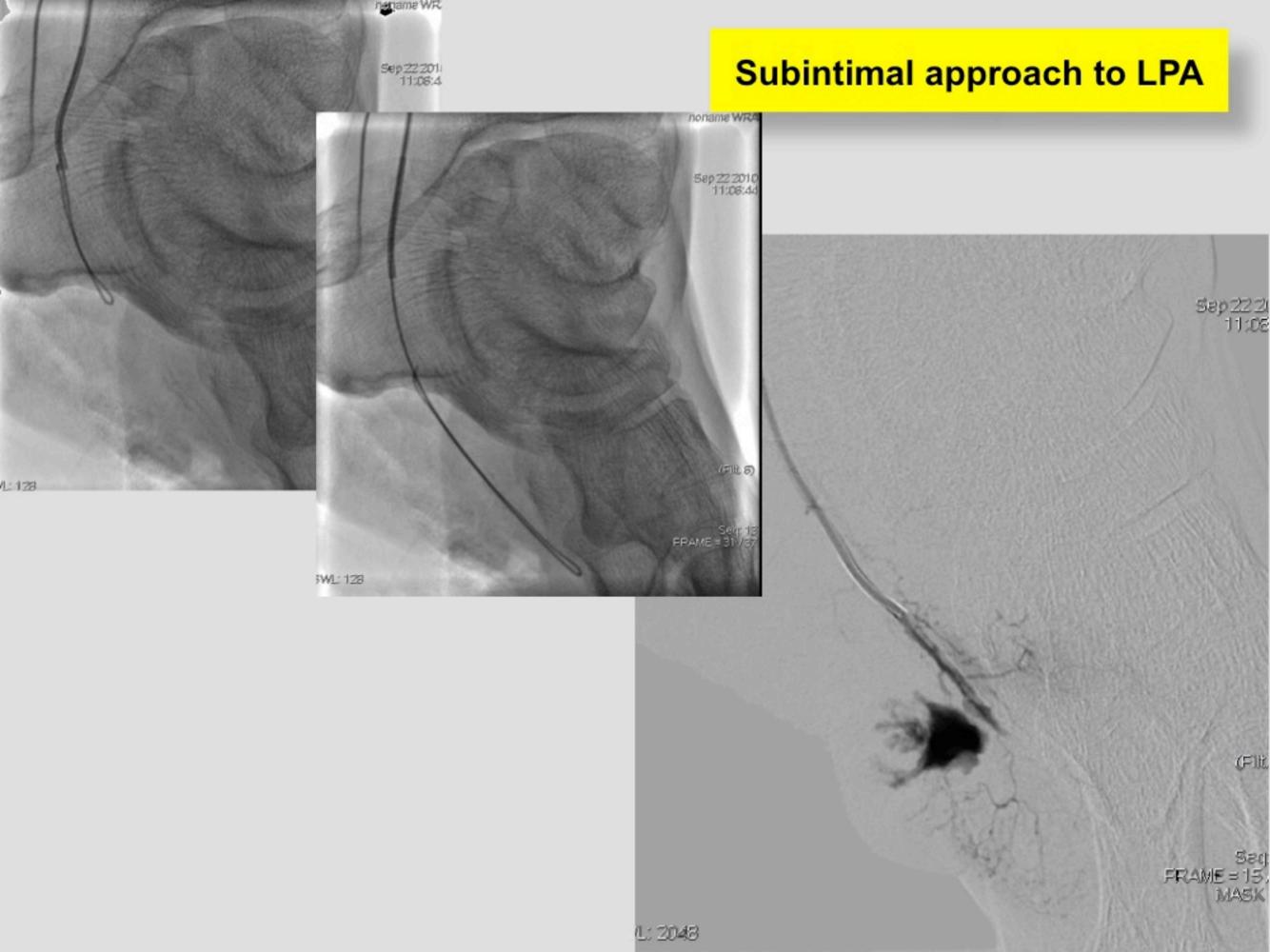
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## Good FEM-POP patency









1°

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#### **Final treatment**

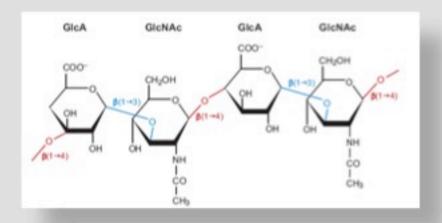
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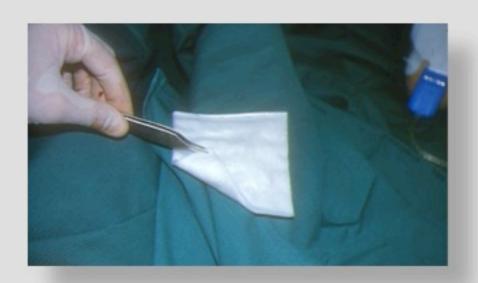
## How to accelerate "ulcer healing"

#### Hyaluronic Acid Bioinductive Dermal Substitute

#### Fundamental constituent of the extracellular matrix (glycosaminoglycan)

- High hydrating capability
- Modulates the process of tissue repair
  - facilitates cellular infiltration
  - stimulates fibroblast proliferation
  - promotes neoangiogenic activity
  - stimulates the production of extracellular matrix





### 28/12/2010 application of HMPA



after 30 days...



after 60 days...



### The end of the story...

### **SKINGRAFT**



ULCER HEALED After 180 days

