



Algodystrofie (CRPS) en Pseudodystrofie

Prof. dr. M. Driessens
Fysische Geneeskunde - Evaluatie Menselijke Schade
UZ Antwerpen

Kennis / Ervaring / Zorg



VII.
(Aus dem Neuen Allgemeinen Krankenhause Hamburg-Eppendorf. Chirurg. Abteilung Oberarzt Dr. Kümmell.)
Ueber die acute entzündliche Knochenatrophie.¹⁾
Von
Dr. P. Sudeck,
Sekundärarzt.

¹⁾ Abgekürzt vorgelesen am 1. Sitzungstage des XXIX. Congresses der Deutschen Gesellschaft für Chirurgie zu Berlin, 18. April 1900.


COMPLEX REGIONAL PAIN SYNDROME, type 1

Reflex Sympathetic Dystrophy, 1-4

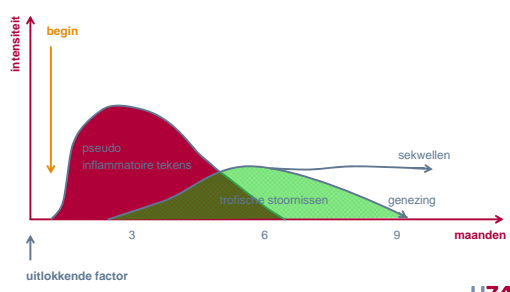
DIAGNOSTIC CRITERIA

1. The presence of a noxious event or a cause of immobilisation
2. Continuing pain, allodynia or hyperalgesia with which the pain is disproportionate to any inciting event
3. Evidence at some time of edema, changes in skin blood flow or abnormal sudomotor activity in the region of the pain
4. This diagnosis is excluded by the existence of conditions that would otherwise account for the degree of pain and dysfunction


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THEORETISCH SCHEMA VAN DE EVOLUTIE



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TOPOGRAPHY

1. Isolated involvement (focal)

- I. Upper limbs
 - RSD of wrist and hand
 - RSD of the shoulder
- II. Lower limbs
 - RSD of the knee
 - RSD of ankle and foot
 - RSD of the hip
 - vertebral RSD

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TOPOGRAPHY

2. Multifocal involvement (unilateral)

- I. Upper limbs
 - shoulder-hand-syndrome
 - tripolar involvement of shoulder, elbow and hand
- II. Lower limbs
 - RSD of knee, ankle and foot
 - RSD of hip and knee
 - tripolar involvement of hip, knee and ankle/foot

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TOPOGRAPHY

3. Bilateral involvement

- I. Upper limbs
- II. Lower limbs

4. Combined involvement

5. Partial involvement

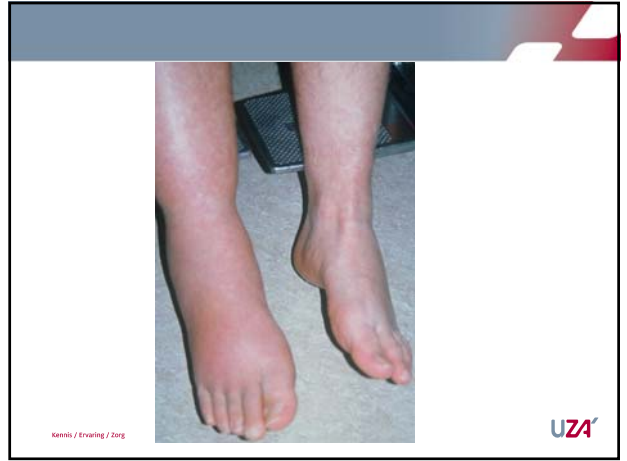
- I. Zonal
- II. Radial

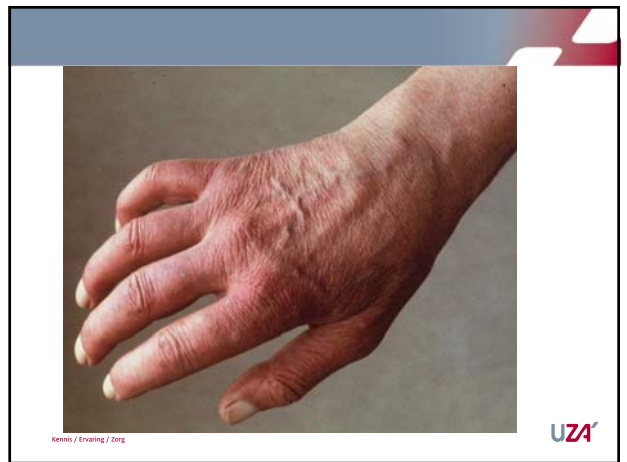
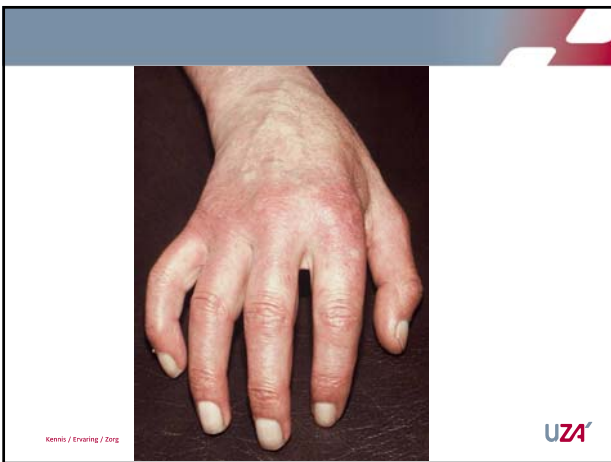
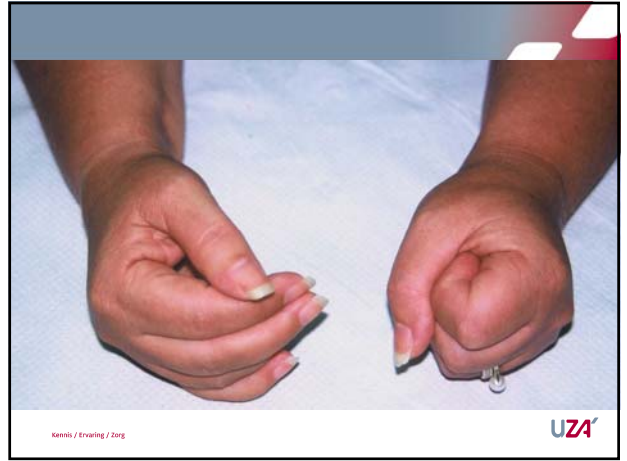
6. Parcellar RSD

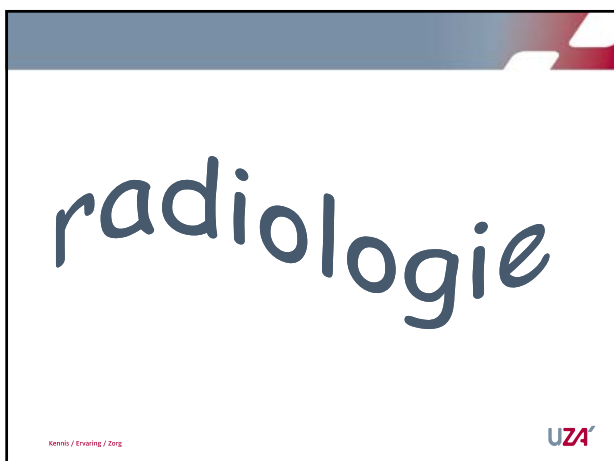
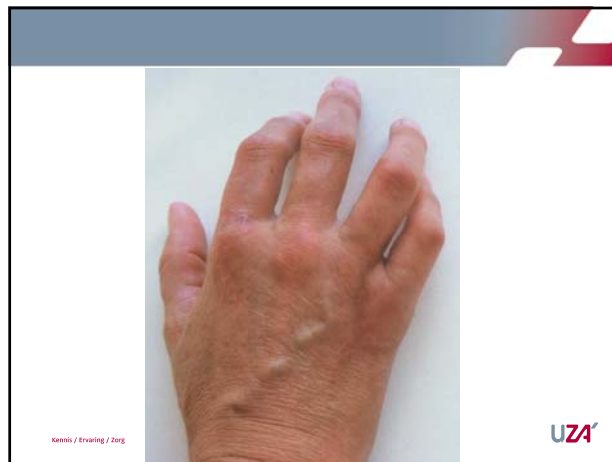
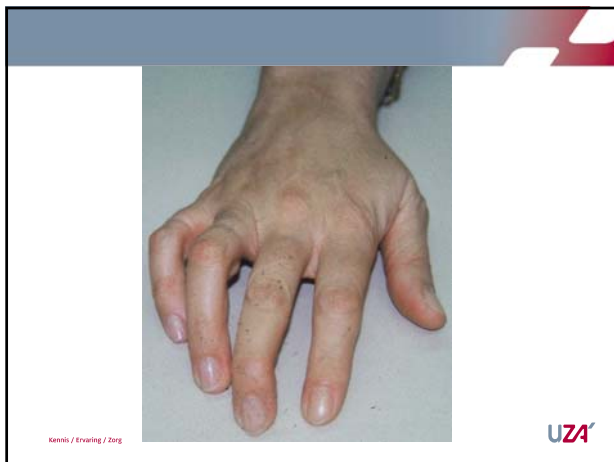
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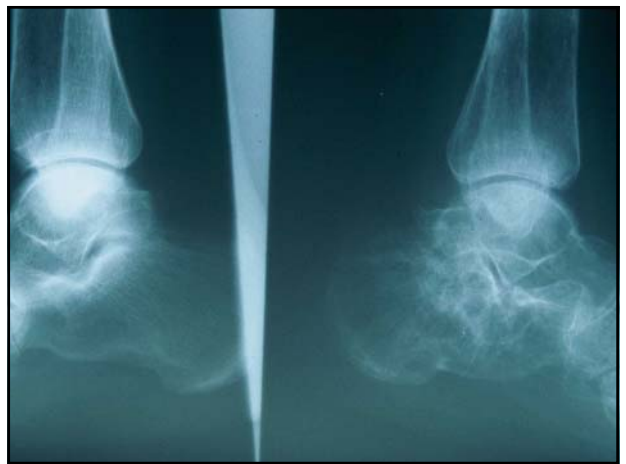
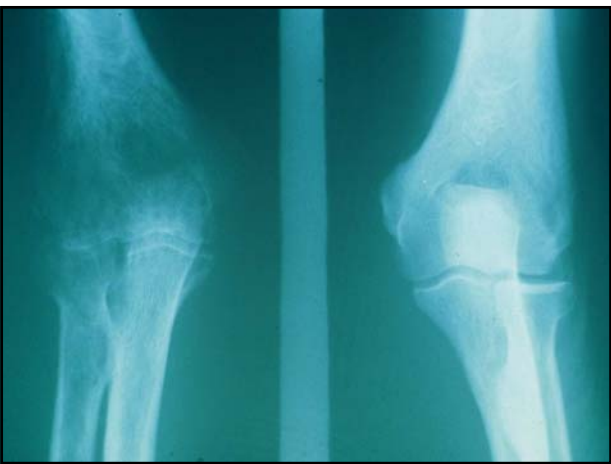
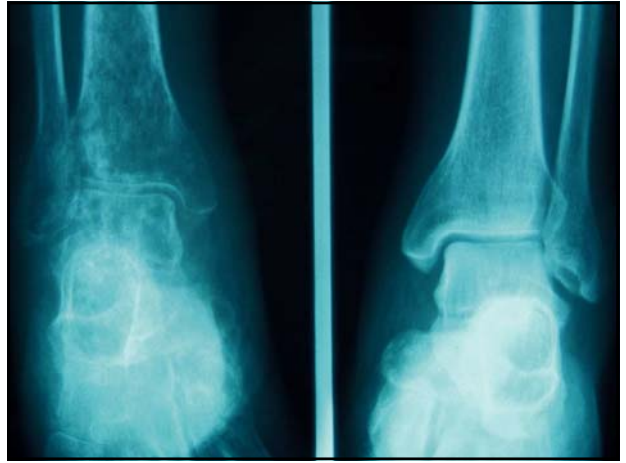
klinische beelden

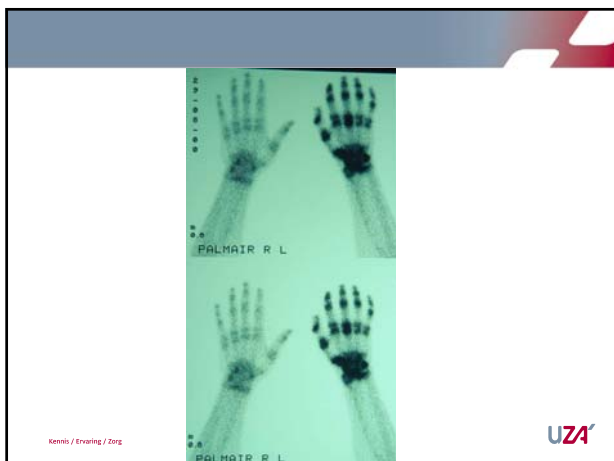
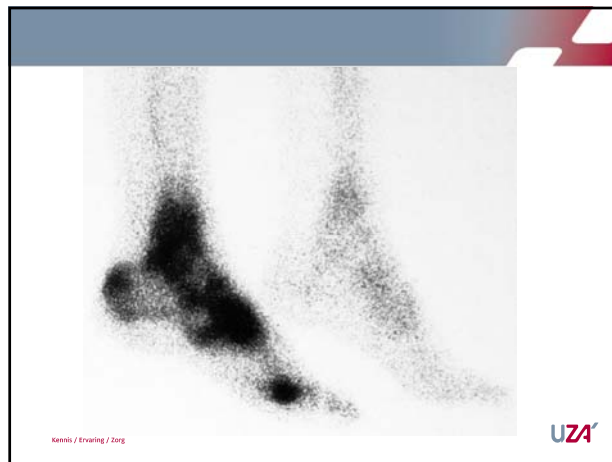
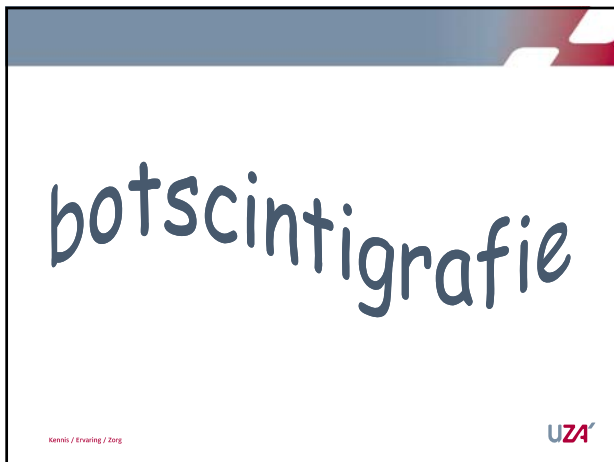
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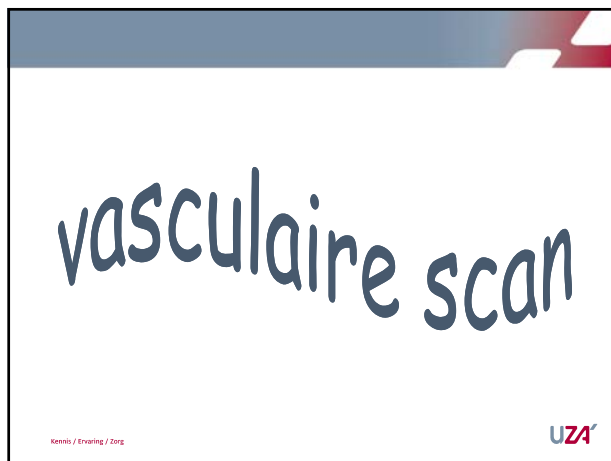
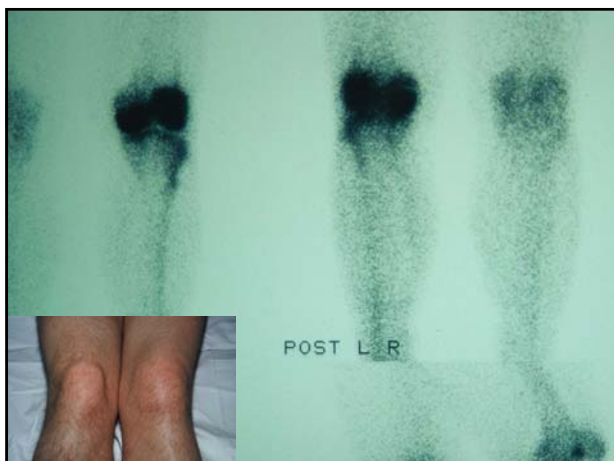
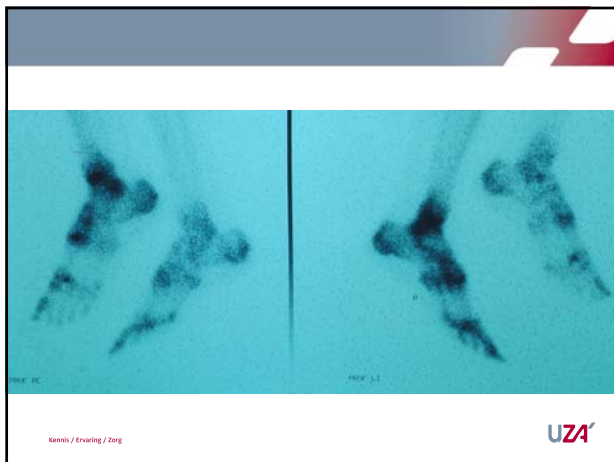


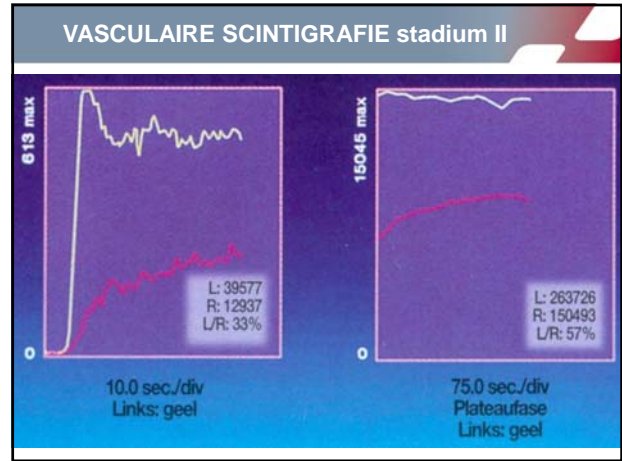
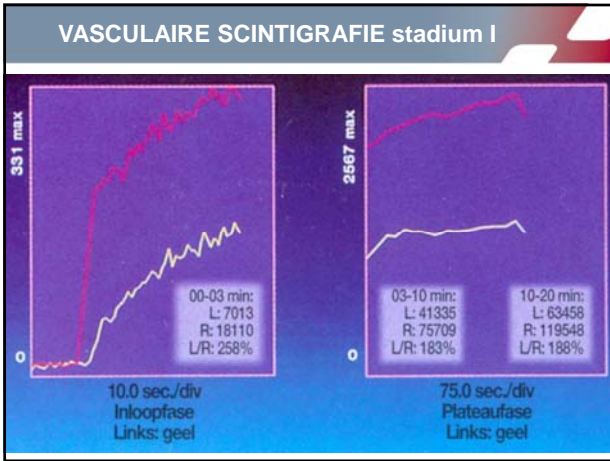












fysiopathologie

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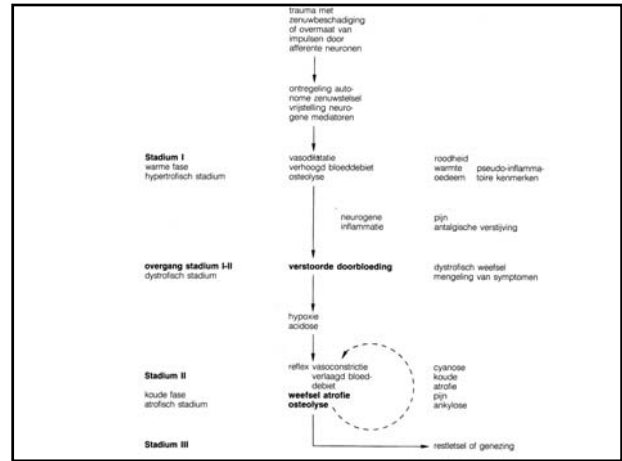
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REFLEX ALGODYSTROFIE - STADIA

- STADIUM I: hypertrofische fase**
 - pseudo inflammatoire tekens
 - hypervascularisatie
- STADIUM I - II: dystrofische fase**
 - dystrofische tekens
 - normale vascularisatie
- STADIUM II: atrofische fase**
 - atrofische tekens
 - hypovascularisatie
- STADIUM III: consolidatie fase**
 - sekwellen
 - normale of hypovascularisatie

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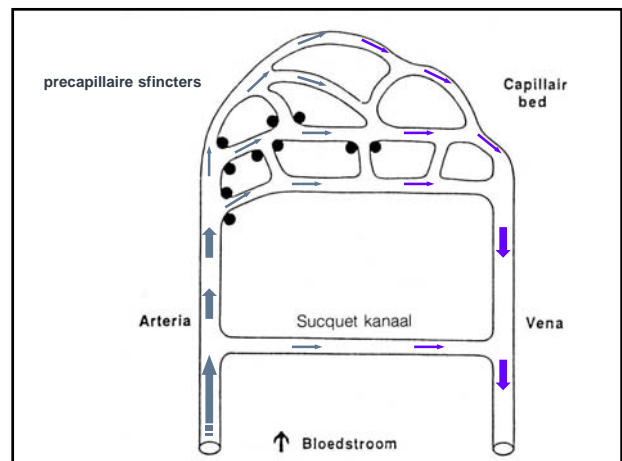
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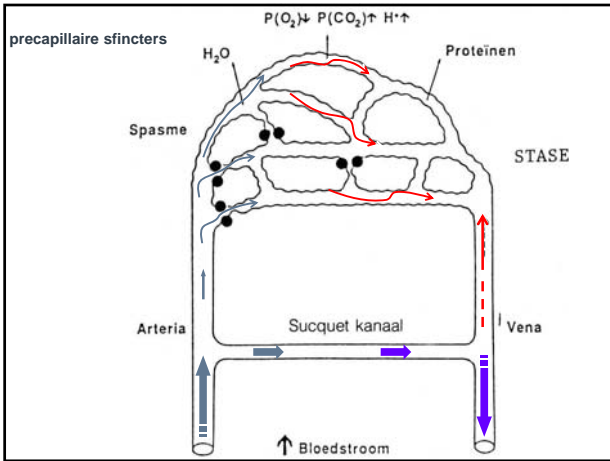


VOORNAAMSTE NEUROPTIDES

- Substance P (Sub P)
- Neurokinine A (NKA)
- Neuropeptide K (NPK)
- Neuropeptide γ (NP γ)
- Neurokinine B (NKB)
- Calcitonin Gene Related Peptide I (CGRP I)
- Calcitonin Gene Related Peptide II (CGRP II)
- Somatostatine (SS)
- Neuropeptide γ (NP γ)
- Vasoactive Intestinal Peptide (VIP)
- Enkephaline

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behandeling

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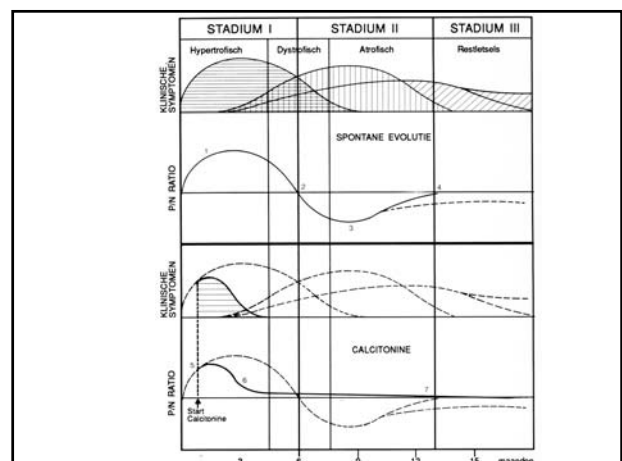
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NUT VAN CALCITONINE BIJ RAD

- Inhibitie van osteoclasten
- Centraal analgetisch effect
- Specifiek vasculair effect op bot

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BEHANDELING - STADIUM II

1. FARMACOTHERAPIE

- calcitonine niet aangewezen agv toestand van vasoconstrictie
- verlagen sympathische tonus (Guanethedine blocks)
- vasodilatatie (Hydergine)

2. FYSIOTHERAPIE

- wisselbaden
- pijndepende elektrotherapie
- mobilisaties voorbij de pijngrens
- thermotherapie (diathermie)
- intensieve oefentherapie

- 3. analgetica
- 4. prognose

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BEHANDELING - STADIUM II

- 1. farmacotherapie
- 2. fysiotherapie

3. ANALGETICA

- adjuvans om pijndrempel te verhogen

4. PROGNOSE

- minder gunstig

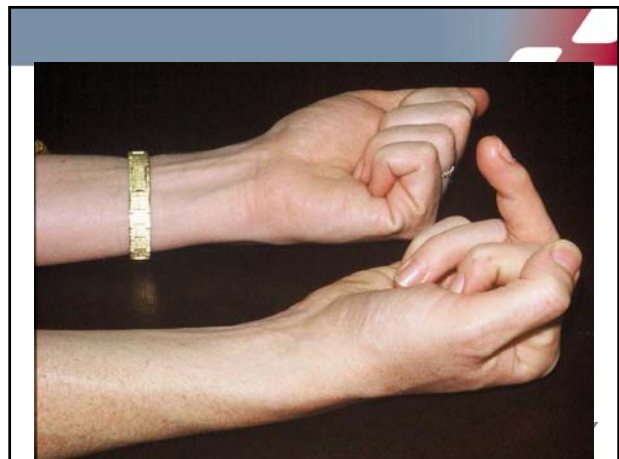
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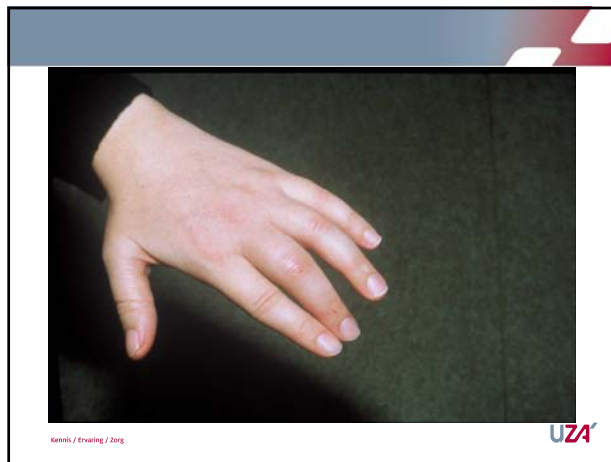
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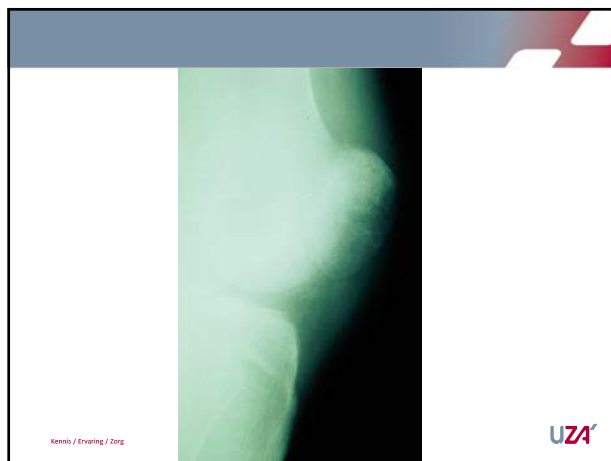
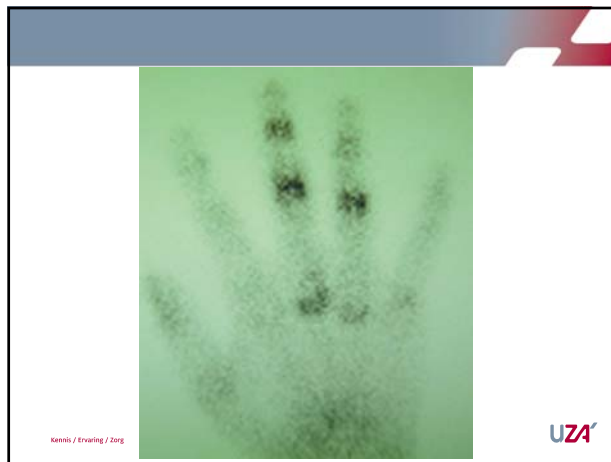
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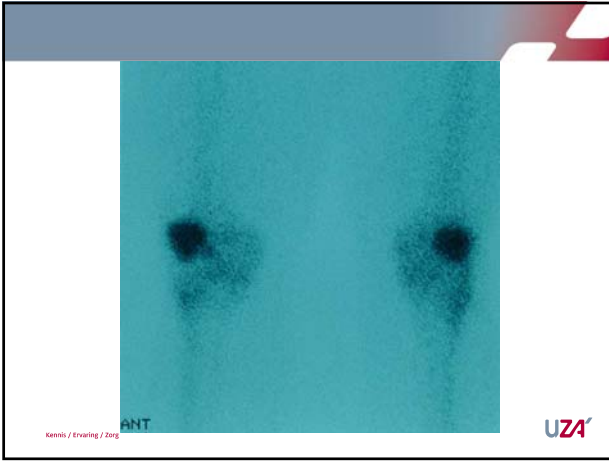
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pseudodystrofië

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PATIENTS REFERRED FOR RSD

Total number	n = 146	%
RSD I	48	54.1 %
RSD I - II	25	
RSD II	2	
RSD III	4	
Pseudodystrophy	12	8.2 %
No RSD	55	37.7 %

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	RSD stage I		Pseudodystrophy	
total (n/%)	48	%	12	%
man	24	50 %	3	25 %
woman	24	50 %	9	75 %
age	53.1		32.6	
children/adolescents	0		7	58.3 %
bone scan	+		-	
vascular scan				
- inflow	147		75.2	
- equilibrium	136		89.2	
cyanosis	18	37.5 %	9	75 %
swelling	37	77 %	2	16.6 %
mobility ↓	41	85.4 %	7	58.3 %
hypersudation	7	35.4 %	1	8.3 %

OVERVIEW

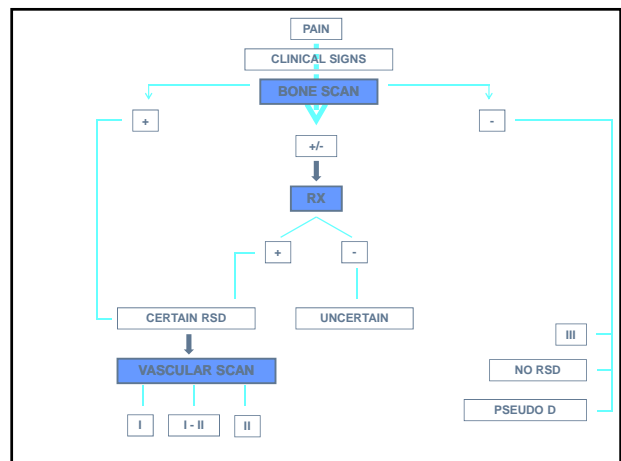
	Bone scan	Vascular scan
RSD stage I	+	↑
RSD stage I - II	+	normal
RSD stage II	+ or ±	↓
RSD stage III	-	↓
Causalgia/sympathetic mediated painsyndrom	-	normal or ↓
Pseudodystrophy/ disuse related dystrophy	- or ↓	normal or ↓
Historical conversion/compulsive neurotic posture/ simulation/ self mutilation	-	normal or ↓

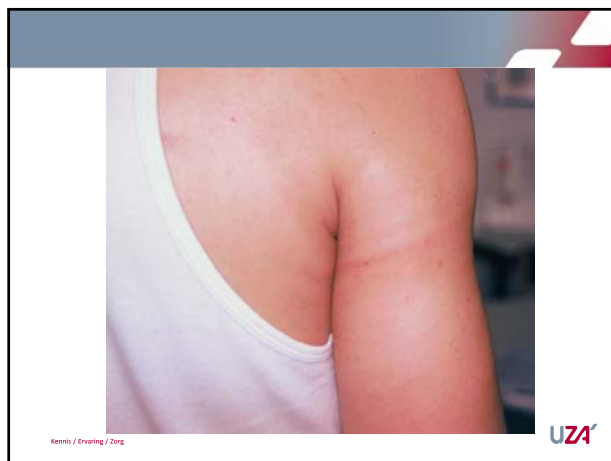
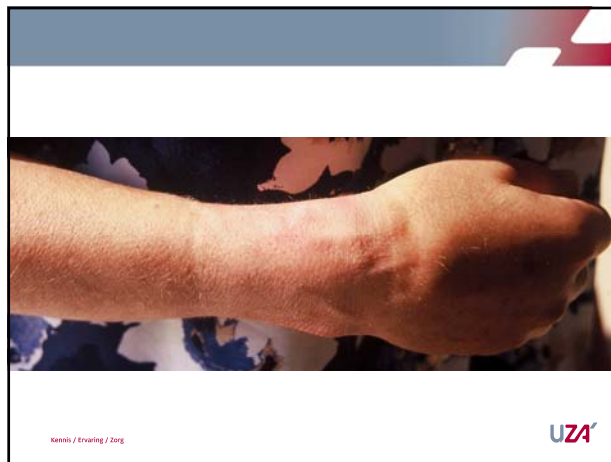


differentiële diagnose

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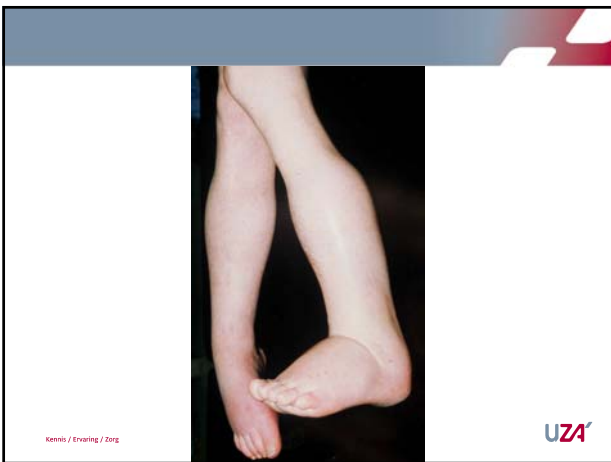
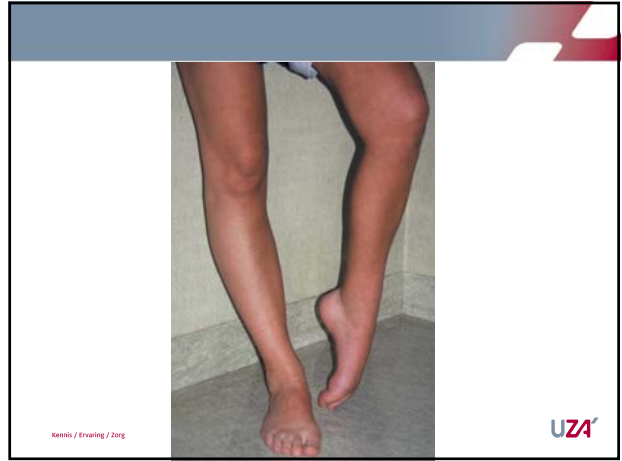


Table 16-16 Objective Diagnostic Criteria for CRPS (RSD and causalgia)

Local clinical signs
Vasomotor changes: <ul style="list-style-type: none"> • Skin color: mottled or cyanotic • Skin temperature: cool • Edema
Sudomotor changes: <ul style="list-style-type: none"> • Skin dry or overly moist
Trophic changes: <ul style="list-style-type: none"> • Skin texture: smooth, nonelastic • Soft tissue atrophy: especially in fingertips • Joint stiffness and decreased passive motion • Nail changes: blemished, curved, talonlike • Hair growth changes: fall out, longer, finer
Radiographic signs
<ul style="list-style-type: none"> • Radiographs: trophic bone changes, osteoporosis • Bone scan: findings consistent with CRPS
Interpretation:
<ul style="list-style-type: none"> ≥ 8 Probable CRPS < 8 No CRPS

Modified from Esaulich LR. Complex regional pain syndrome. In: Brighton DR, ed. The Green's Handbook. Chicago, Ill: American Medical Association; 1999:14.