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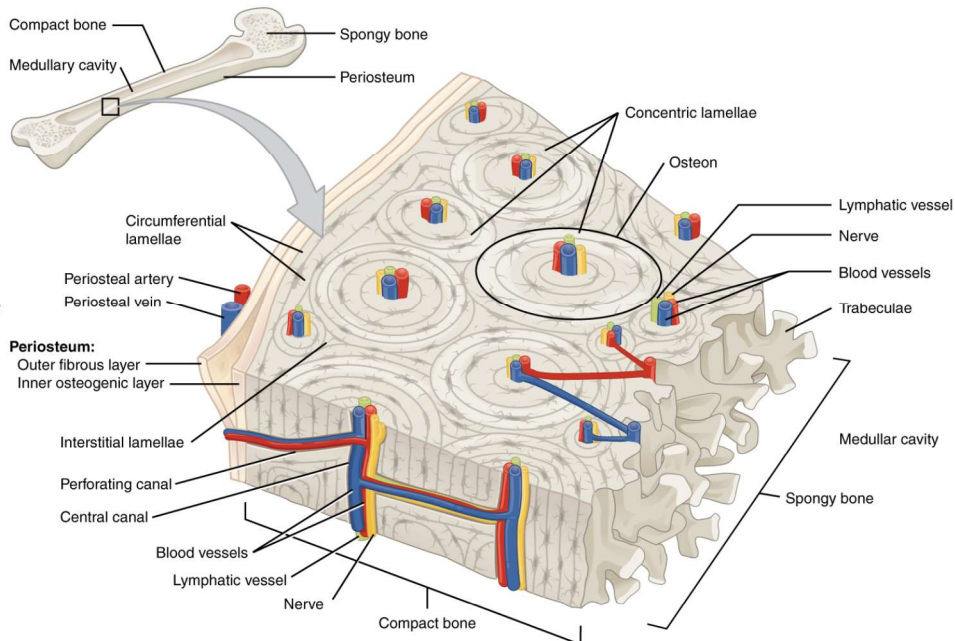
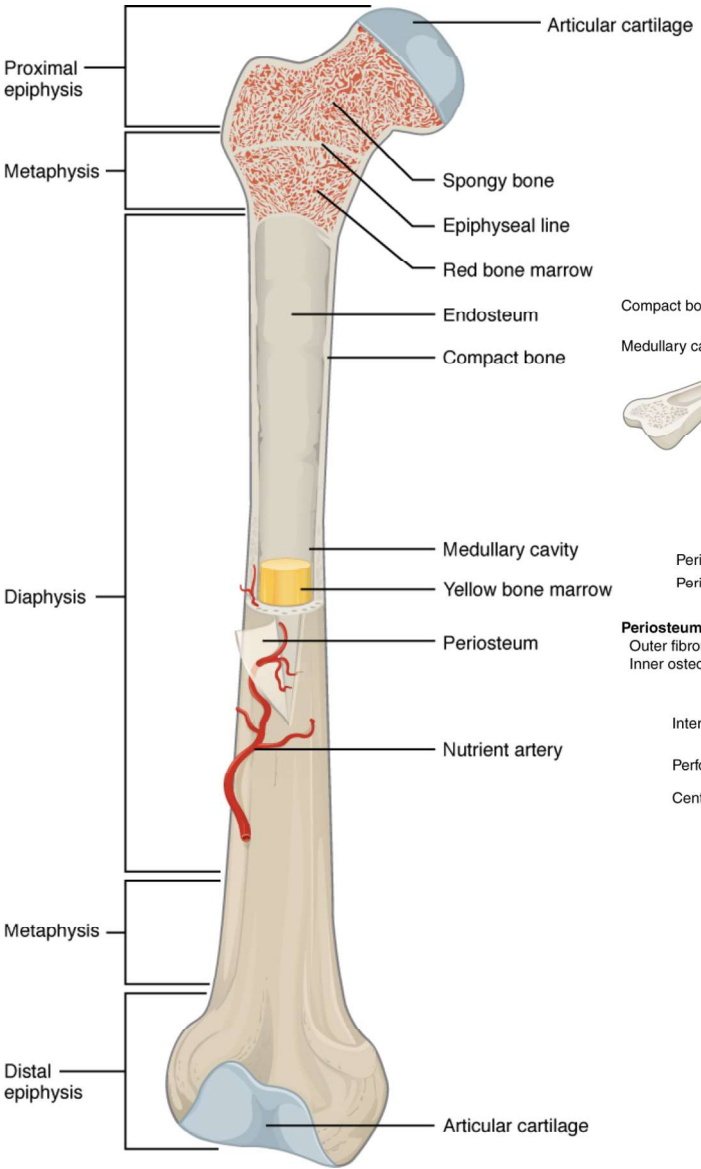
De biologie van fractuurheling

Dr. T. Ackerman

23 maart 2019

Ghelamco Congres

- Botstructuur
- Eigenschappen van bot
- Botheling
 - Direct
 - Indirect



Introductie

Eigenschappen

- Steunpilaar
- Grote stijfheid en kracht
- "Bot is sterk, maar het breekt onder kleine deformaties"
- "constitutio ad integrum"



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Direct vs Indirect



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Indirecte (secundaire) heling



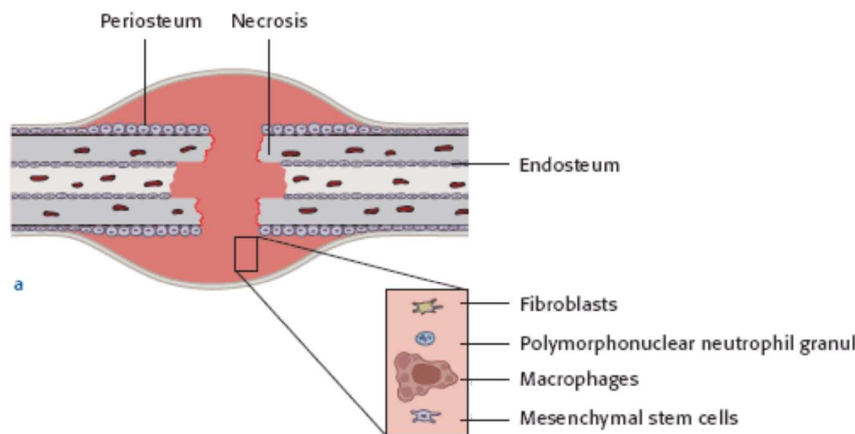
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Inflammatie

- Hematoom
- Inflammatoire respons
- Osteoclast activiteit
- Granulatie weefsel



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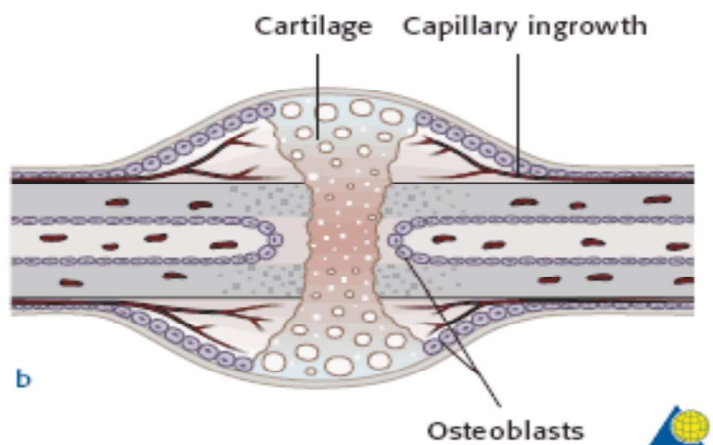
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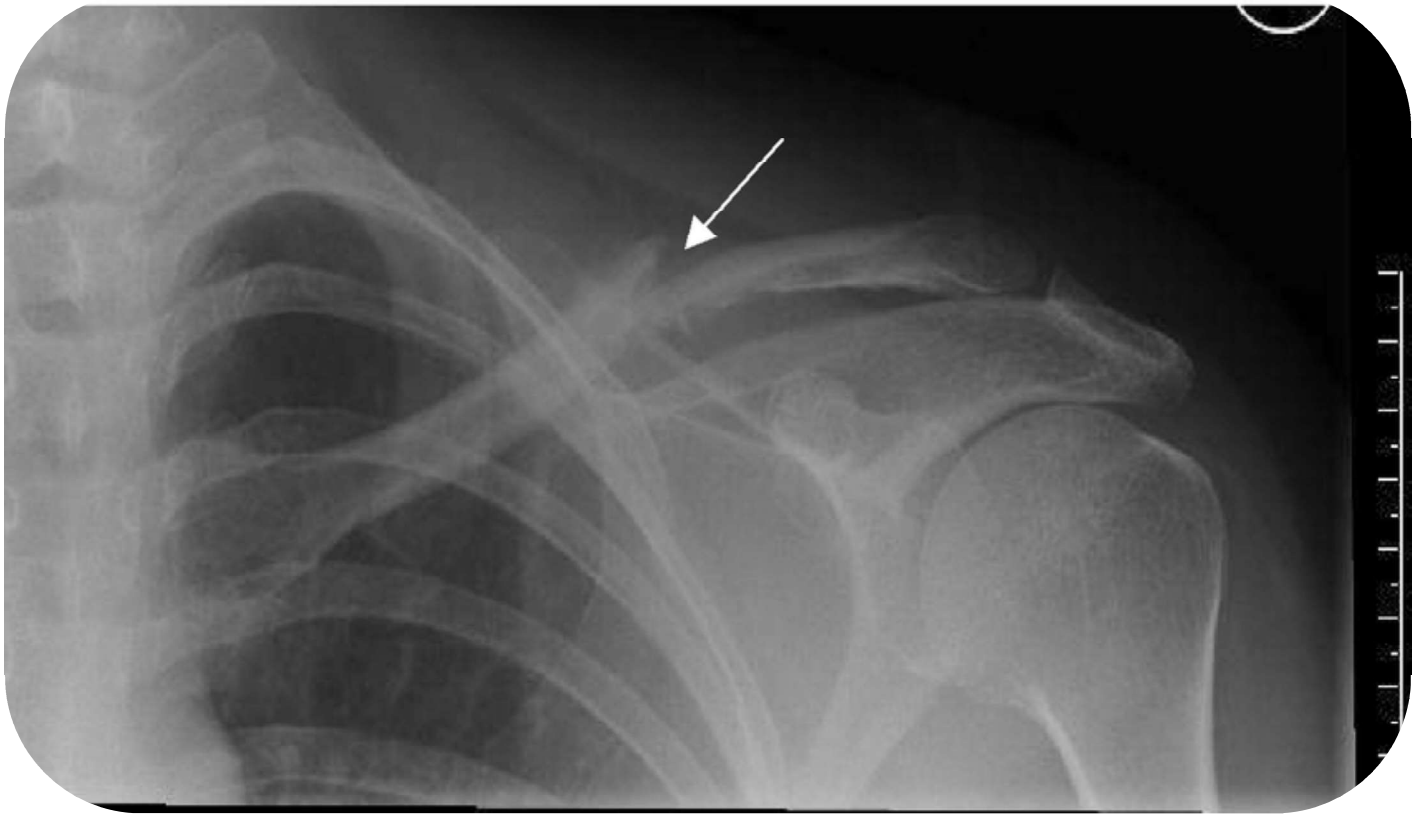
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Zachte callus

- Wanneer?
- Osteoblast formatie
- Ingroei capillairen
- Groei: 2 types





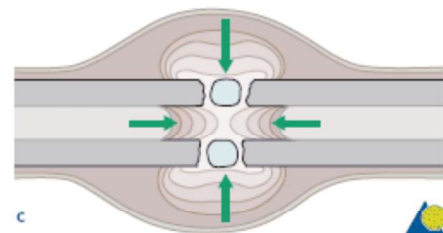
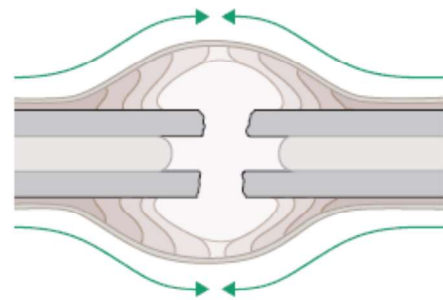
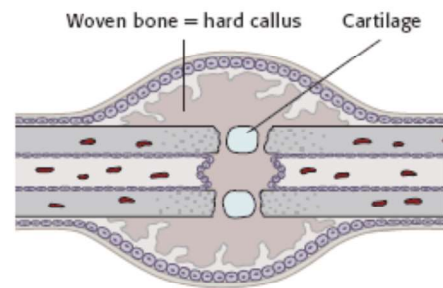
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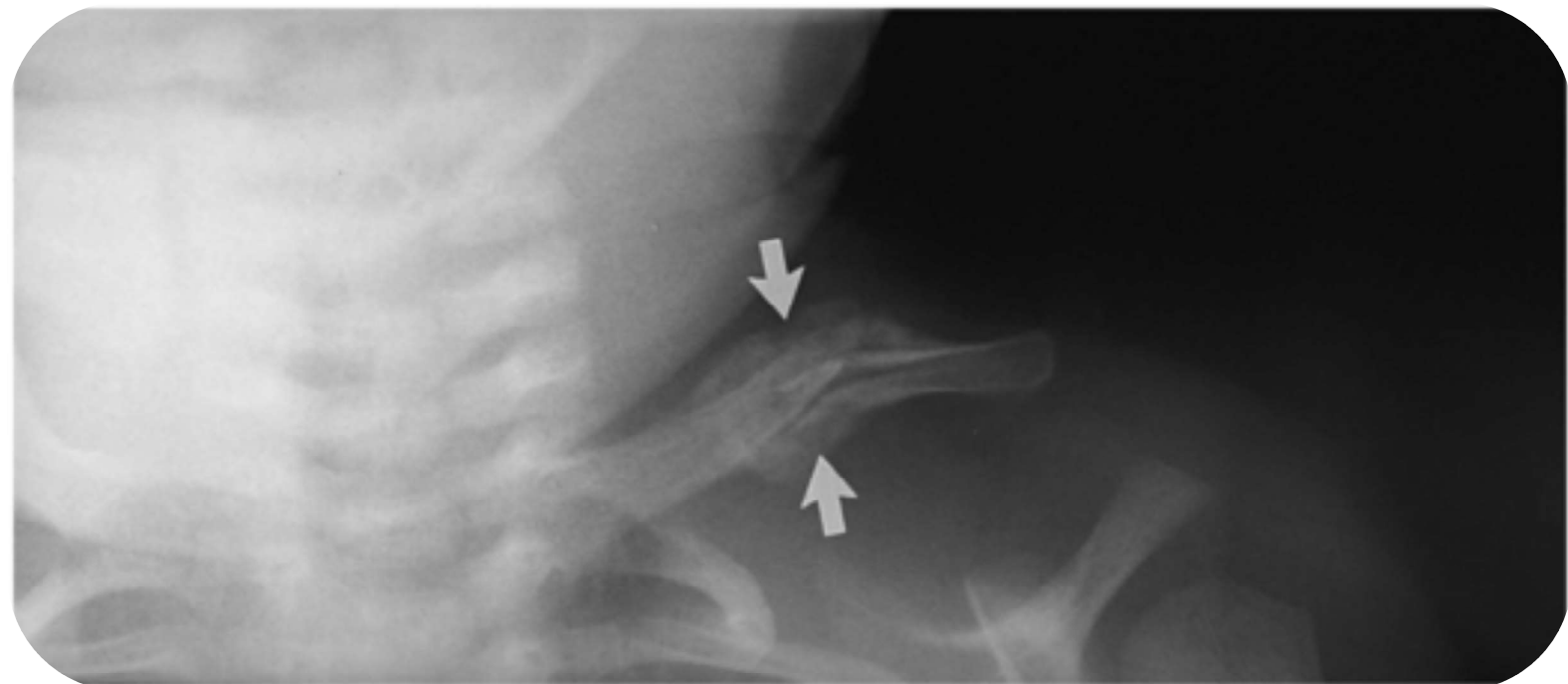
Harde callus

- Progressieve calcificatie
- "Outside-in"



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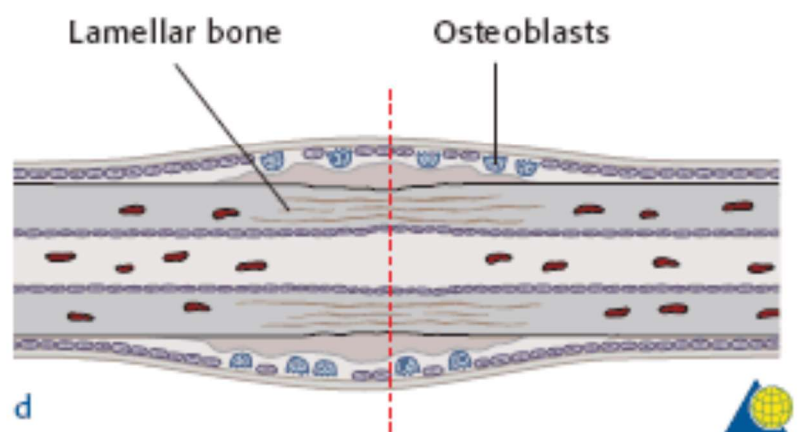
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Remodellering

- Geweven → lamellair bot
- Eindstadium: originele morfologie
- Wet van Wolff

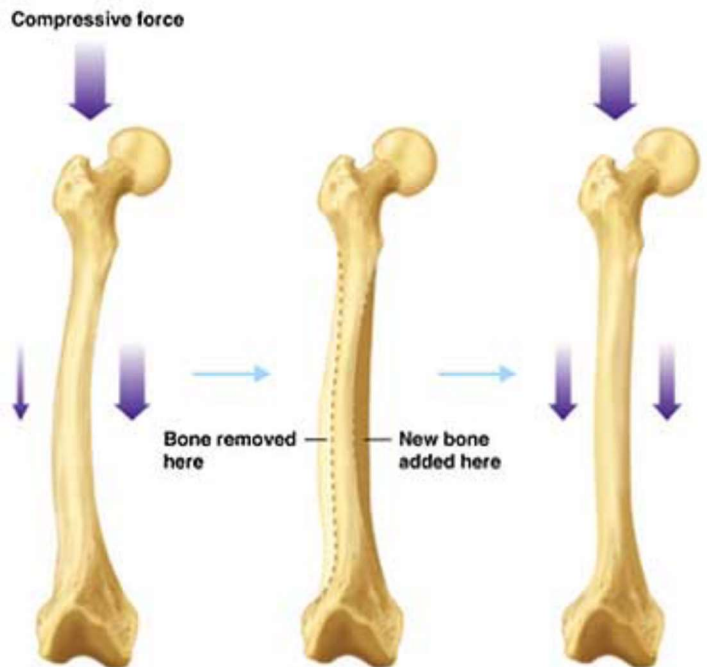
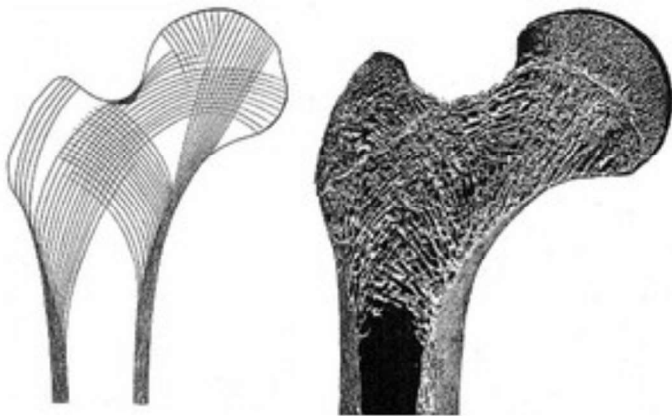


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Wet van Wolff



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Directe (primaire) botheling

- Wanneer?
- Doel?
- Radiografie?
- Haversiaanse remodellering

