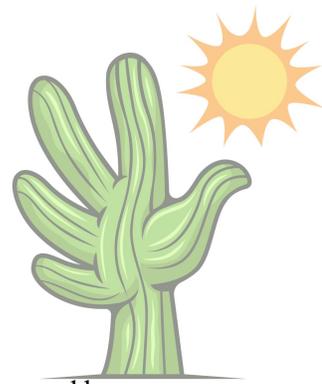


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DUPUYTREN DISEASE



What is it?

- Benign development of thick palmar fascia which can cause joint contractions, dimples, and bumps on the hand.
- The contractures sit on top of the tendons and can also push the nerves and arteries more superficial, toward the skin.
- Can also occur on the plantar fascia (bottom of your foot).
- Cellular level: there is a change in the type of collagen and the myofibroblast cells proliferate.
- Painless, but bothersome.

Who gets it?

- 2:1 – men:women.
- Most commonly 50s-70s.
- People of Northern European descent – especially Scandinavian.
- Possible genetic contribution (Autosomal Dominant)
- Most common on the ring and small finger.



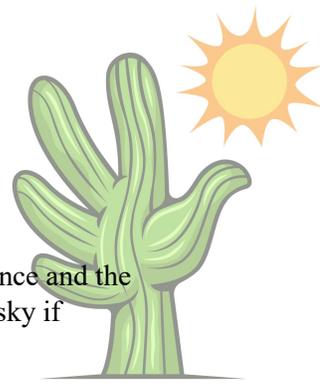
What can you do about it?

- No MRI/CT/X-Ray are needed. Clinical exam only.
- Most of the time the hand is watched over time to monitor possible progression, but surgical intervention is not common
- Xiaflex injection, which dissolves the abnormal collagen, and can straighten the finger after manipulation.
 - o Often tears skin and can irritate the soft tissue

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- My preference is not to use Xiaflex injection: There is a higher rate of recurrence and the injection can make the soft tissues abnormal – making surgery difficult and risky if needed after the injection
- Surgery is rarely indicated.
 - Surgery is done when the joint contracture is 30-40°.
 - Surgery involves cutting out the problematic contracted tissue.
- A “Digit Widget” may be applied to slowly stretch out the finger to the appropriate position.
 - May or may not involve removing the diseased tissue after the digit widget is removed which usually occurs around 6-8 weeks.
- Therapy and splints are not beneficial and do not change the course of the progression.
- Small nodules can be injected with a steroid.



Surgery

- Involves an incision from the middle portion of the palm extending into the affected finger.
- The nerves and arteries are carefully dissected.
- The contracted cord is removed. If needed, the joints are also released.
- Immediate range of motion is encouraged.
- Sometimes, if the finger is very contracted, a digit widget may be applied to slowly stretch the finger out before surgery.
 - Because the arteries and nerves are on the palmar side of the hand, in Dupuytren’s disease, these become shortened over time.
 - Suddenly straightening the finger can cause the arteries to collapse, leading to necrosis of the finger from lack of blood supply.
 - For chronic, very contracted fingers, a digit widget may be applied.

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Dr. Dunn's surgical preference:

- I prefer to treat advanced contractures (especially at the middle knuckle PIPJ) with a digit widget.
- Other bothersome contractures can be surgically released.
- I do not use Xiaflex.

Outcomes

- Recurrence rates:
 - o Xiaflex injection + manipulation: 10-20%/year.
 - o Surgical excision: 5-10%/year.
- After surgery, patients will have full use of their hand once the sutures are removed at 2 weeks.

Complications

- Xiaflex injection:
 - o Extensive bruising, skin tears, local reaction.
 - o Tendon rupture.
- Surgical excision:
 - o Prolonged inflammation, delayed healing, damage to nerve/artery.
- Both procedures risk loss of finger from ischemia when the finger is straightened.
- Digit widget risks include pin site infection.