

Introduction

- It is not uncommon for the diabetic patients to experience different foot problems. Some of the most common issues encountered with the diabetic foot is neuropathy, poor circulation and sometimes wounds. Per the American Diabetes Association guidelines it is recommended that diabetic patient have a yearly foot evaluation. Though uncommon soft tissue masses are encountered in the diabetic foot. A fast and thorough diagnosis can leads to faster treatment.

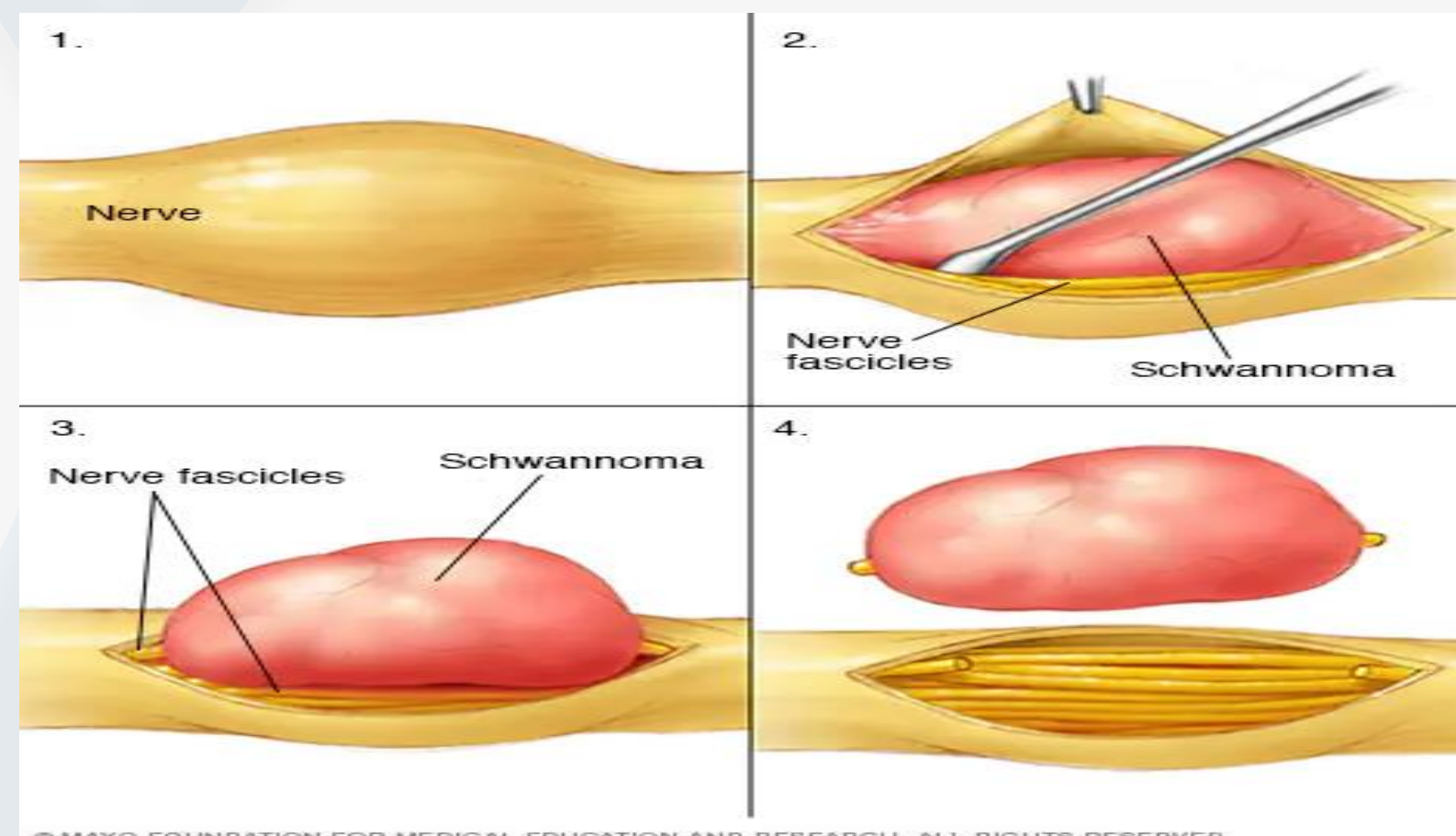


Figure 1: Schwannoma

Case Study

This is a case study of a 49 year old female that presents to podiatry with a chief complaint of painful lump of her left foot. Patient is diabetic and also presented for her yearly diabetic foot evaluation. The painful mass of her left plantar medial midfoot was becoming more bothersome and limiting her day to day activities. She states the mass has been present for over 5 years but has gotten more painful. She has not noticed any increase in size, but does have increase in pain especially with prolong standing. She stands at least 12 hours a day for work in waterproof boots as she works in a factory. She has tried multiple over the counter pain medication with not much relief.

- Past medical history: HTN, DM type 2, hyperlipidemia
- Allergies: NKDA
- Medications : HCTZ, lipitor, Glumeteza, Lisinopril
- Past surgical history: none
- Social history: none

Physical Finding

- Dermatology:** flesh colored soft tissue mass x2, distal to the medial malleoli, firm, nonmobile, plantar medial left foot.
- Vascular:** Bilaterally palpable dorsalis pedals and posterior tibial pulses, capillary refill time of less than 3 seconds bilaterally
- Neurology:** Epicritic and proprioceptive sensations intact via semms Weinstein and tuning fork.



Figure 2: Initial presentation

- Musculoskeletal:** mild tenderness to palpation of mass.
- DX imaging MRI:** nonspecific cystic lesions in subcutaneous fat, abutting the superficial fascia measuring 1.2 x 2 x 1.7 cm an d.5 cm x 1cm x 1 cm.

Management

- Diagnostic procedure:** 2 core biopsy samples were taken from the lesion and placed in formalin. The biopsy sample was sent to pathology for further analysis
- Pathology findings:** Schwannoma x 2
- Operative management radical resection of soft tissue mass**
 - A 3 cm incision was made directly at the glabrous and normal skin junction. A 15 blade was used to incise the skin and dermis. Tenotomy scissors were used to dissect around the mass down to the base of the wound. The top portion was densely adherent to the skin. 15 blade was used to dissect around it and the skin was intimately involved. Therefore the dissection was performed around the mass and the mass removed. The skin was not viable and therefore a 3x2cm ellipse of skin was removed and tagged with proximal short and posterior long.
 - After the skin was excised the wound was too large to perform a direct closure. Therefore local tissue rearrangement was needed. We designed a bi-pedicle bucket handle flap that was 3cm long and 4cm wide with a 3x2cm defect. This was placed in close proximity to our second mass. The tissue was then undermined completely to be able to be advanced and primary closure achieved. Hemostasis was performed along the way.



Figure 3: The appearance after skin and dermis incision

- We then turned our incision to the proximal mass. This mass was not involved with any surrounding skin and was easily dissected down to the subcutaneous/adipose tissue. It shelled out effortlessly. Prior to excising it completely we used a nerve stimulator to ensure no major motor branches from the posterior tibial nerve or medial plantar nerve were affected.



Figure 5: Mass appearance after removed

Discussion

- It is not uncommon to encounter soft tissue masses during physical evaluation of a patient. In each instance a thorough and detailed history should be taken. The history taking can often guide us to the next step in regards to diagnostic imaging and definite treatment. A Schwannomas is a soft tissue tumor that develops in peripheral nerve sheaths, they are usually benign in natures and usually do not cause discomfort to the patient. They are usually not very common in the foot, and when presented a thorough detailed tumor work up must be done. The schwannomas is known to become painful when they are adjacent or entangled with the nerves. Patient will normally complain of painful mass in foot especially with ambulation. A quick diagnosis will often leads to faster tumor management limiting serious disabilities.

Bibliography

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