

A Case Report on Ganglion Cyst of The Wrist

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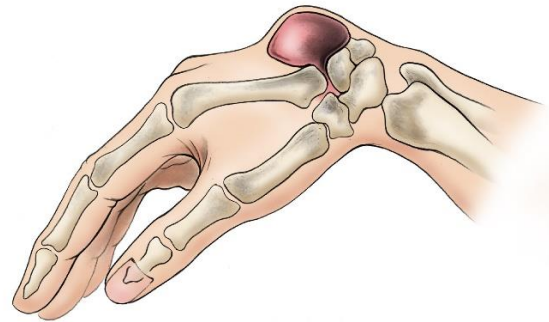
Abstract— Ganglion cysts are the most common mass or lump in the hand. They are not cancerous and, in most cases, are harmless. A ganglion arises out of a joint, like a balloon on a stalk. It grows out of the tissues surrounding a joint, such as ligaments, tendon sheaths, and joint linings. Ganglion cysts are the most common soft-tissue tumours of the hand and wrist, making up 60–70% of soft-tissue masses in the area. They can form at any age, but are most common in women between the ages of 20–50, who are three times more likely to develop them than men. A 39 year old women reported to our facility with complaint of swelling on the right wrist for the past 6 months. There is no other associated complaints like pain, movement restriction. Physician advised to observe for increase in size with any complaints of pain or activity restriction. Return to medical facility for Surgical excision if symptoms worsens. This case high lights the importance of diagnosis and health care professional role in providing psychological support, guidance and providing knowledge on treatment options available.

Index Terms- Ganglion Cyst, Tumour, Wrist

I. INTRODUCTION

Ganglion cysts are the most common mass or lump in the hand. They are not cancerous and, in most cases, are harmless. They occur in many locations, but most often develop on the back of the wrist. A ganglion arises out of a joint, like a balloon on a stalk. It grows out of the tissues surrounding a joint, such as ligaments, tendon sheaths, and joint linings. Inside the balloon is a thick, slippery fluid, similar to the fluid that lubricates the joints. Ganglion cysts are the most common soft-tissue tumours of the hand and wrist, making up 60–70% of soft-tissue masses in the area. They can form at any age, but are most common in women between the ages of 20–50, who are three times more likely to develop them than men. They are common among gymnasts, who repeatedly apply stress to the wrist. Ganglion cysts can develop in several of the joints in the hand and wrist, including both the top and underside of the wrist, the end joint of a finger and the base of a finger.

Symptoms include aching in the wrist that may also radiate up the patient's arm, pain with activity or palpation of the mass, decreased range of motion and decrease grip strength. Volar ganglia may also cause paresthesias from compression of the ulnar or median nerves or their branches



PATIENT INFORMATION

A 39 year old women reported to our facility with complaint of swelling on the right wrist for the past 6 months. There is no pain or restriction of movement. Patient is on thyroid medication for past 14 years and on regular medications. There is no reported family history of similar presentations. But she had a family history of her mother died due to breast cancer. She is much worried about that and to confirm that she verbalized that she came to medical facility.



CLINICAL EXAMINATION

The patient was alert and had good mental state and cognition: all vital signs were stable. On wrist examination, findings revealed that right wrist which measured 1*1 cm tense cystic swelling present. There is no tenderness and all range of motion present. There is no associated warmth or erythema and the cyst readily transilluminates Then the physician diagnosed as ganglion- Right wrist dorsum.

THERAPEUTIC INTERVENTION

Physician advised to observe for increase in size with any complaints of pain or activity restriction. Return to medical facility for Surgical excision if symptoms worsens.

PATIENT PERSPECTIVE

“I am incredibly grateful for the comprehensive care and support I received from the entire healthcare team during my visit. I am now happy that it is non-cancerous which burdened me a lot.”

DISCUSSION

A physical examination is often all that is needed to diagnose a ganglion cyst, but physician may suggest other tests. An ultrasound is done to determine whether the bump is fluid-filled or it is solid, which may mean it is a tumour and also to detect whether an artery or blood vessel is causing the lump. An X-ray may be used to rule out other issues such as tumor or arthritis. But for this patient no other test was done except physical examination since clinical presentation is usually adequate for diagnosis

Initial treatment of a ganglion cyst is nonsurgical, Observation, immobilization, aspiration and surgery. A wrist brace or splint may relieve symptoms and cause the ganglion to decrease in size. If the ganglion causes a great deal of pain or severely limits activities, the fluid may be drained from it. This procedure is called an aspiration. Becker, in 1953, introduced steroid injection after aspiration. Derbyshire, in 1966, reported a remarkable 86% success rate, but in a study of only 22 patients, some of whom were followed for only 2 months, and such lofty results have not been reproduced The area around the ganglion cyst is numbed and the cyst is punctured with a needle so that the fluid can be withdrawn. Surgery involves removing the cyst as well as addressing the stalk from which the cyst arises. This may mean removing part of the involved joint capsule or tendon sheath to ensure removal of the root of the cyst. Even after excision, there is a small chance the ganglion will return. The Complications include infection, neuroma, unsightly scar, and keloid. Additionally, postoperative stiffness, grip weakness, and decreased range of motion may occur

CONCLUSION

The interest in ganglia and the wide variety of treatments that have been developed are probably a result of its frequent presentation to physicians and lack of a fully satisfactory mode of treatment. Aspiration is a beneficial and simple option for acute management, but appears to have little long-term impact on resolution. Current adjunctive measures, on the other hand, provide no benefit over aspiration alone. Surgery offers improved resolution of ganglia,

but is often more invasive than is warranted by patient symptoms. This case report threw light into diagnosis of ganglion. Personalized approaches underscore the critical need for psychological support and interventions to bolster self-esteem and remove misconceptions about the cyst. Sustained educational initiatives are imperative for healthcare professionals to enhance comprehension, facilitate early identification, and optimize outcomes for individuals grappling with the ganglion.

INFORMED CONSENT: The patient provided informed consent for the publication.

COMPETING INTERESTS: The authors declare no competing interests.

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