



BENIGN TUMORS OF UPPER LIMB

Plastic Surgery

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ABSTRACT

INTRODUCTION : Upper Limb is one of the common site for various varieties of swellings. Importance is based on whether the swelling is Benign or Malignant, whether recurrence is common or not, and if a cosmetic problem is present.

METHODS : Cases of Benign tumors who attended our hospital for a period of six months from Jan 2017 to June 2017 were noted. Follow-up varied from 6 months to 15 months.

RESULTS : In our series, Giant cell tumor tops the list followed by Ganglion and Glomus tumors. Clinical diagnosis was confirmed after surgery by biopsy.

CONCLUSION : All cases were manageable by surgery. Recurrence is noted in few cases. Wound healing was good.

KEYWORDS

Tumor, Glomus, Giant cell, Ganglion.

INTRODUCTION :

The upper extremity is a common site for swellings. Because of the exposure it invokes the curiosity of the onlookers. When the size increases such that it is visible even from a distance, it becomes a subject of discussion even for the strangers. Everyone suggests various treatment modalities with the aim of avoiding surgery or its complications. All the native treatments has no role in these swellings which are situated in deep places leaving surgical removal as the only possible option.

MATERIALS AND METHODS :

Patients with swellings in the upper limb proved benign after excision biopsy were included in this group. A total of 22 cases over a period of 6 months (Jan 2017 to June 2017) were taken. Cases of swelling from arm to the tip of the fingers were included.

Of the 22 patients, 14 patients were Females. 8 were males. Age group varied from 19 to 65 years. 5 Patients had recurrence in the same place.

LOCATION OF SWELLING	NUMBER OF CASES
Elbow	1
Forearm	3
Proximal and middle fingers fingertip	18



Fig.1, Recurrent benign spindle cell tumor of elbow



Fig.2, Chronic granulomatous tumor (Fungal origin)



Fig.3, Spindle cell tumor



Fig.4, Giant cell tumors

TIMING OF SURGERY :

Patients were taken up for surgery after basic investigations and fine needle aspiration cytology and MRI in cases of recurrent swellings.^{[1][2]} The patients were operated with regional, local block as mostly outpatients. Surgery was done with 4x loupe magnification preserving vital structures. Post operative period was uneventful. Suture removal was done after the wound healed well.

DISCUSSION :

Benign tumors are a vast entity seen in the upper limb. Though similar swellings can occur in other parts of the body as well, few swellings are specific and seen here more often.

TYPE OF SWELLING	NUMBER OF CASES
Benign spindle cell tumor	2
Ganglion cyst	5
Giant cell tumor	7
Glomus tumor	4
Chronic granulomatous swelling (fungal)	2
Implantation dermoid	2

Surgery in the cubital fossa needs more care for the simple reason that recurrence of the lesion is possible in incomplete surgery. As identification of structures is important, loupe magnification and nerve stimulation is a good adjunct for a successful surgery.

Swellings in the finger were operated under digital block. For cases of Giant cell tumor and Glomus tumor use of tourniquet helps in total removal of the swellings. In swellings like Glomus tumor incomplete removal leads to faster recurrence rate which necessitates further surgery. Giant cell tumor arising from the tendon sheath, grows along the least resistance and can present in both volar and dorsal surfaces after growing along the side of terminal phalanx.^[2] For both the sides, removal can be done through Nail bed splitting incision. Proper repair of the nail bed prevents painful scars and unsightly nail improving cosmetic appeal.

A case of recurrent Glomus tumor was operated by Ablation of Total Nail Bed Germinal matrix and covered with Reverse Dermal Cross Finger flap.^{[4][5]} When the the tumor is arising from mid-finger, positioning and maintenance needs special care with Plaster of paris

slab to prevent damage to the flap.

COMPLICATIONS :

- 1) Injury to cutaneous nerve in the Cubital fossa surgery.
- 2) Ganglion surgery by inexperienced operators with excessive dissection will result in gross swelling, painful movement of the fingers and delayed recovery.
- 3) Unsightly scar in the nail bed with nail abnormalities.
- 4) Necrosis of the dorsal skin flap.
- 5) Hematoma on the volar aspect in cases of nail splitting surgery.
- 6) Recurrence in incomplete excision. Eg., Glomus tumor.
- 7) Early division of the flap in cases of incomplete protection without plaster of paris slab in finger flaps

LIMITATIONS OF THIS STUDY :

1. Single centre study
2. Multiple surgeons performing the surgery
3. Observer bias

CONCLUSION :

It is interesting to note that occupation can be associated with the type of swelling eg., Implantation dermoid in tailors, Chronic abscess in farmers following thorn prick. Recurrence is to be expected when the surgeon fails to perform complete excision of the lesion. Tissue handling is of utmost importance because of the nature of the soft tissue. Germinal matrix and sterile matrix do not tolerate repeated trauma.

Less hospital stay is good for early recovery and healing of the wound. Surgery greatly improves the social participation and boosts the level of confidence.

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