Section: General Surgery

Case Series

UNUSUAL SITES AND SIZES OF SOFT TISSUE LESIONS PRESENTING AS A CHALLENGE TO THE OPERATING SURGEON: A CASE SERIES

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Abstract

Benign soft tissue lumps are one of the common presentations in elective surgeries. Each case needs to be individually assessed and only after that definite surgery is planned with aim of best possible restoration of normal anatomy. Lump in close vicinity of vitals structures presents as a challenge to operating surgeon as there is always risk of injury to vital neurovascular structures. In this case series we have described five atypical cases which presented to us which have quite diversity of sizes and locations. Best possible cautions must be made during surgery of such cases especially when nearby vital structures are present. Operating surgeon should be well versed with all anatomical planes and its advised to brush up on regional anatomy before going for surgery.

INTRODUCTION

The very basics of surgery circle around removal of pathological specimen with restoration and reorganizing of normal anatomy in best possible way. As simple as it sounds to be but many times it often leads to thought block scenarios to the operating surgeon. Soft tissue masses especially in the neighborhood of vitals structures always possess a challenge to operating surgeon. Injury can occur even in the most experienced hands. It's always advisable to have sound knowledge of nearby organs before going within any body cavity.

Before going for surgery the operating surgeons should discuss possibility of all sort of complication to patients and caregivers, there should not be any unnecessary hurry for surgery. As patients generally don't have any sort of apprehension for any sort of complications or major morbidity before going for operation for benign masses so any sort of unforeseen scenarios lead loss of trust between healthcare providers and operating surgeons additionally burden of medico legal consequences.

In this cases series we are describing 5 cases which presented to us which we managed successfully. The very close association of masses was a source of anticipation to us.

MATERIALS AND METHODS

This study was conducted in General Surgery, Autonomous State Medical College, Firozabad U.P India. Study duration was 1 year. Total five cases were enrolled in this study.

CASE 1

The first case was a young female patient aged 17 years who presented with complaints of mass in the right axilla, which was firm to hard in consistency and was seated deep in the axilla. FNAC was suggestive of accessory breast tissue. The lump was situated deep in the right axilla and was extracted taking the utmost care not to damage any underlying neurovascular structures.

Discussion: Accessory breast is an embryological anomaly. It's a condition in which an individual is having more than two breasts. It also goes by name of polymastia, supernumerary breasts, or mammae erraticae. Nipples may or may not be breast in accessory breast tissues. Its possible that patient is not aware regarding it till puberty.[1]Accessory breast is more common in Native American populations when compared worldwide.[2] Common location for its appearance includes thoraco abdominal region, but it may be present in face, back and thigh.[3,4] They are routinely detected

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clinically, and presents as painless lump which is asymptomatic but in doubtful cases MRI scanning is needed.[5]

Polymastia was classified by 1915 by kajava in which he divided into the following subgroups

Class I: consists of a complete breast including glandular tissue, nipple, and areola.

Class II: consists of only glandular tissue and nipple, without areola. Class III: consists of only glandular tissue and areola, without nipple. Class IV: consists of only glandular tissue. Class V (pseudomamma) consists of only nipple and areola, without glandular tissue.

Class VI: (polythelia) consists of only the nipple.

Class VII: (polythelia areolaris) consists of only the areola.

Class VIII:(polythelia pilosa) consists of only hair.

A diversity of treatment methodologies exists for this condition like liposuction, reduction mammoplasty, complete surgical removal etc. complications of procedures include size irregularities, seroma formation, wound infection etc.

Figure 1: showing per-operative photograph of exicison of right accesory breast

Figure 2: showingspecimen which was extracted

CASE 2

Second case was a young 22 years old female who presented to us with complaints of soft to firm lump at umbilicus for last 3 years. There was no history of pain or change in size with any strenuous activity like coughing or lifting heavy weight. It was a sebaceous cyst which was simply excised without the need or going inside the abdomen cavity.On first look it appears to be umbilical hernia as sebaceous cyst at umbilicus it quite an unusual finding.on careful inspection punctum can be appreciated.The patient was operated and discharged uneventfully.

Discussion: A sebaceous cyst is also called Epidermoid cysts or Pilar cyst.[6]They contain sebum and often has chances to get infected.

They can be present in any part of the body with the only exception of sole and feet.[7] It presents as lumps of variable sizes and has an overlying typical punctum over the surface. It has been shown related to high level of testosterone or frequent in people using anabolic steroids.[8]Treatment modalities include complete excision of whole sac along with its contents.[9]There exist threeproposed methods which include traditional wide excision, minimal excision, and punch biopsy excision.[10]

Removal is a simple outpatient procedure that can be performed under local anesthesia. cyst along with overlying skin is removed and normal skin margins are apposed with simple non – absorbable sutures. If the cyst is infected than a course of broad-spectrum antibiotics may be necessary.

Figure 3: clinical photograph showing sebacious cyst at umblicus

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CASE 3

Patient was also a young female patient aged 27 years who came to us 2.5 years long history of lump at right lateral margin of upper chest.Lump was firm to hard in consistency and was approximately of size of 15 x 10 cm. It was pedunccculated massand wasfree of axilla or underlying breast and chest wall. No evidence of lymphodenopathy at axilla or at any body sites. Rest local or systemic examination was within normal limits.FNAC was suugestive of benign mass. Its was exicised taking a margin of healthytissue. Patient was discharged uneventfully.

Discussion: Before going for radical exicison of lumps operating surgeon must be crisp and clear regarding the nature of lumps. Benign lumps and malignant lumps have a totally different management regimens and plans.Benign lumps can be safely removed by wide exicisons but in conditions of malignant lumps quite often chemoradiotherapy is required.

A tumor can be aid as benign if it doesn't invade neighboring structures or has not metastasized in body. Benign lumps have a relatively slow pace of growth as compared to malignant lumps. it may remain symptomatic orcausesymptoms due to mass effectsin surrounding areas leading to ischeamia, tissue necrosis.[11] Some benign lumps have the ability to secretes hormones leading to symptoms eg insulinomas can release large amount of insulin leading to hypoglycemia.[12] some may cause cosmetic problems especially present over external body surfacecausing psychological or social discomfort for the person with the tumor.[13] Vascular masses may lose large amount either acutely or chronically leading to anaemia in the patient.[14]

Figure 4: Clinicalphotograph showing pre-operative presenation

Going in treatment part, benign lump doesn't as such requires any treatment unless its causing secondary problems like mass effects in surrounding organs or causing cosmetic disfigurement. Surgical removal is the most appropriate way to get rid of the problems as these lumps don't usually respond to chemo or radiotherapy.[15]Some exceptions includebenign intracranial tumours which may need chemo or radiotherapy. Skin tumors can be surgically removed but other modality of treatments also exist like cryotherapy, curettage, electrodesiccation, laser therapy, dermabrasion, chemical peels and topical medication etc.[16]

Figure 5: clinical photograph showing exicised specimen.

CASE 4

Amiddle-agedpatient of52 years presented in our OPD with long-standing history of lump behindleft elbow joint.Lump wassoft to firm in consistency, free mobile but in closed proximity to elbow joint. Masses in close vicinity ofanyjoint cavityof opening the joint capsule which will exponentially increase the morbidityof patient. Clinical diagnosis of lipoma was made and mass was exicised without any difficulty.

Discussion: A lipoma is a benign tumour which is made of fat and tissues.[17]Prevalance of lipoma is 2 in every 100 people.[18] Lipoma is the commonest non-cancerous soft tissue tumour.[19] Presentation is soft in consistency, freely movable, painless lumps.It can occur in any part of body but commonest location includes upper back, shoulder and abdomen.[20]Commonly advocated risk factors inlude history of obesity, family history etc. hereditary diseases likefamilial multiple lipomatosis might lead to development of lipoma.[21]

Best methods for diagnosing this condition are detailed history and physical examination but for deep seated lipoma sometimes diagnosis is difficult and for thatmagnetic resonance imaging (MRI) imaging modality help is needed.[22]

For aymptomatic cases, no treatment is needed but, in those situations, where its causes cosmetic

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disfigurement or restriction of movements than surgical removal is advocated. Simple surgical removal is sufficient in most of the situations.[23]Recurences if occurs is dealt in similar way. Some newer modalities of treatment includecauterization, electrosurgery, and harmonic scalpel.[24]

Figure 6: Clinical photograph showing per-operative apearance.

CASE 5

A young patient aged 14 years female presentedto us in OPDwith complaints of lump over right nipple of around 1-month duration which was around 1x0.5 cm in size and was tender on palapation. Provisonal diagnosis ofnipple papilloma was made. Mass was excised and patient recovered uneventfully.

Figure 7: showing pre-operative clinical photograph of growth over right nipple.

Discussion

Any growthor lump over breast shouldbe throughly evaluated before taking the patient to the operating table. Benign breastmasses and malignant masses has a totally different plan of action. Simple removal of lump is sufficient in case of benign masses whereas malignant lump may need pre-operative or post-operative chemo-radiotherapy.

Triple test scoring system is needed for diagnosing cancerous lumps which includephysical examination, mammography and needle biopsy. Results of all their test is needed before making a conclusive diagnosis and management of patient.

CONCLUSION

Benign soft-tissue masses are quite comfortable to dissect out but one must be very careful about their anatomical relations.When working with lumps or masses in vicinity of neurovascular structures operating surgeon should be more careful than the usual.Its always recommended to brush up the relevant anatomical planes before going for any surgery.

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