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AN INVESTIGATION OF THE DELINEATION ON LEFT GLUTEAL SOFT TISSUE BENIGN SARCOMA

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ABSTRACT
Soft-tissue sarcoma, is a rare cancer, whose influence can be problematic depending on its origin and can create complications, patient's prognosis depends on the histological grade of the tumor and the extent of spread. Ultrasound can be a diagnostic tool to identify the size, shape, and location of a mass. Visually it looks like lump it can be hard or soft depending on its content, a painful lump which has enlarged in short duration of time can be indication of the cancer, Patients early recognition of its enlargement and physicians response can reduce any further damage, depending on patients medical history and physical state,suitable therapeutic and non therapeutic response can be initiated. The authors present a case of 17 years old male patient who was presented in the emergency department as he developed huge swelling in the left gluteal region reaching scrotal and perianal region, upon local examination by the physician, swelling had hard and regular consistency. Patient may have developed small lump which eventually enlarged and spread across scrotal and preanal region, over a course of 8 months which is cause of concern as the growth rate is fast and can be cancerous, this enlargement is hard and painful upon touching which is also a sign of sarcoma The authors reviews the literature and discusses treatment options available for the management.

KEYWORDS: Soft-tissue sarcoma, Gluteal region, Scrotal region, Perianal region.

INTRODUCTION
Soft tissue is the non-epithelial, extra skeletal structures which includes the fibrous connective tissue, adipose tissue, skeletal muscle, blood or lymph vessels, and the peripheral nervous system and which excludes the lymphohematopoietic tissues. Soft tissue Sarcomas are classified as either benign or malignant on the basis of histogenesis. Soft tissue sarcomas is originally described as the uncommon type of sarcomas although the Benign soft-tissue tumors are usually common and can be treated with surgery i.e., excision.[1] They account for 1% of cancers and there are of about 50 types of soft tissue sarcoma.[2] Symptoms may not be apparent and the only sign is the formation of a lump, constitutional symptoms include, Pain, Inflammation and, swelling at the site of neoplasm.[3,4]

It is difficult to point out what exactly is its etiology, but which has been concurred are

➢ **Genetic factors**

1. Familial neurofibromatosis, caused by mutations in the Neurofibromatosis(NF1 gene).[5]
2.Familial retinoblastoma, caused by inherited mutations in the **retinoblastoma** (RB gene).[6]
3. Familial Li-Fraumeni syndrome where there is inherited mutations in the TP53 tuour suppressor gene.[7]

➢ **Radiations-** the emergence of radiation-induced genetic mutations that encourage neoplastic transformation.

➢ **Chronic lymphedema:**chronic lymphedema may predispose a person to develop a lymphangiosarcoma.

➢ **Environmental carcinogens:**It has been reported that there is an association between exposure to various carcinogens and an increased incidence of soft-tissue neoplasms.

➢ **Infection:** An example of infection-induced soft-tissue tumor is Kaposi sarcoma resulting from human herpes virus type 8 in patients with human immunodeficiency virus (HIV).[9,10]

○ According to WHO (2002) Classification of Soft Tissue Tumors[8] Soft tissue tumors are divided into the following four categories

Benign: These usually do not recur locally, and if they do, the recurrence is nondestructive and almost always

readily curable by complete local excision[11]. Morphologically benign lesions which are extremely rare, may give rise to distant metastases that cannot be predicted on the basis of routine, histological evaluation. Cutaneous benign fibrous histiocytoma is the best example[12].

Intermediate (locally aggressive): These tumors show an infiltrative and locally destructive growth pattern; however, they do not metastasise. The example in this category is fibromatosis.

Intermediate (rarely metastasising): These tumors are often locally aggressive but in some cases, they also have a tendency to produce distant metastases (usually in a lymph node or lung). This risk is low (< 2%). The classic examples are plexiform fibrohistiocytic tumors and angiomatoid fibrous histiocytoma[13].

Malignant: Soft tissue sarcomas are locally destructive with the potential to recur; the risk of distant metastasis is significant. (Depending on the histological type and grade, the potential ranges from 20 to almost 100%.)[14]

CASE REPORT

Case Report on Soft Tissue Sarcoma of Left Gluteal Region

Pharmaceutical Care Plan

Subjective Data: A 17 years old male was asymptomatic eight months back, and he developed huge swelling in the left gluteal region reaching scrotal and perianal region, upon local examination by the physician, swelling had hard and regular consistency.Patient may have developed small lump which eventually enlarged and spread across scrotal and preanal region, over a course of 8 months which is cause of concern as the growth rate is fast and can be cancerous, this enlargement is hard and painful upon touching which is also a sign of sarcoma.

Objective Data

It includes Vital data & Laboratory data.

I. Vital Data

Vitals	Day1	Day2	Day3	Day4	Day5	Day6	Day7	Day8	Day9	Day10
PR	82b/min	99b/min	92b/min	76b/min	76b/min	81b/min	92b/min	88b/min	85b/min	82b/min
BP	110/70	112/82	110/80	110/70	120/90	120/80	110/80	110/70	120/80	120/80
RR	21/min	20/min	18/min	22/min	21/min	23/min	19/min	18/min	19/min	22/min
Temp	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal

II. Laboratory Data

1. Complete Blood Picture

Hematology	Values	Normal Range
Hb	11.9gm/dl	13-17gm/dl
RBS	4.4millions/cumm	4.5-5.5m/cumm
WBC	5,400/cumm	4000-11000
Neutrophils	48%	40-80%
Lymphocytes	37%	20-40%
Monocytes	09%	02-10%
Eosinophils	06%	01-06%
Basophils	00%	Less than 1-2%
Platelets	3.34Lakhs/cumm	1.5-4lakhs/cumm

2. Complete Urine Examination

URINE	Value
Epithelial cells	**3-4/HPF**
Pus Cells	**4-6/HPF**
Albumin	**(+)**

3. Electrolytes

Electrolytes	Values	Normal Range
Sodium	**141meq/lt**	135-155
Potassium	**4.3meq/lt**	3.5-5.5
Chloride	**102meq/lt**	96-106

4. Biochemical Investigations

Biochemistry	Values	Normal Ranges
Serum Creatinine	**0.8mg%**	0.7-1.3
Random Blood Sugar	**81mg%**	70-140
Blood Urea	**32mg%**	13-43
Serum Uric Acid	**5.9mg%**	2.6-7.2

5. CT-BT Test

Test	Values
CLOTTING TIME	**2 Min : 30 Sec**
BLEEDING TIME	**4 Min : 15 Sec**

6. ESR

1st hour	05mm
2nd hour	**10mm**

7. Cytopathology (FNAC)

Microscopic Examination: Smears are Paucicellular composed of Spindle Cells with mostly Benign nuclei. Background shows myxoid material.There is no Atypia.

Impression: Scanty Smear- S/O Spindle Cell Neoplasm.

Assessment

From the FNAC(Fine needle aspiration cytology) Report, the final diagnosis is **Soft tissue Sarcoma of Left Gluteal Region**.. Benign soft-tissue tumors are treated with surgery i.e., excision. according to **WHO (2002) Classification of Soft Tissue Tumors**[8] benign soft tissue sarcoma usually do not recur locally, and if they do, the recurrence is nondestructive and almost always readily curable by complete local excision. Morphologically benign lesions are extremely rare, may give rise to distant metastases that cannot be predicted on the basis of routine, histological evaluation. Cutaneous benign fibrous histiocytoma is the best example.

Intermediate (locally aggressive)

These tumors show an infiltrative and locally destructive growth pattern; however, they do not metastasise. The example in this category is fibromatosis.[15]

Intermediate (rarely metastasising)

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Patient was advised to undergo surgery, upon examination surgeon didn't find and complication and scheduled for surgery the following day.[18]

Operation Record

1. Under spinal Anaesthesia Painting & Draping done.
2. Patient is in Left Lateral position.
3. Incision taken in the left infra gluteal region.
4. Layers opened & neoplasm was dissected and removed.
5. Drain placed
6. Haemostasis secured
7. ASD done.

Plan

PRE-Operation Orders

1. Reserve 2 Units of PCV[Blood Group- O^{+ve}].
2. Nil By Mouth from midnight.
3. PAC
4. Informed Consent
5. Inj. Taxim 1 gm, IV, Stat.
6. Inj. Tetanus Toxoid[T.T] 0.5 cc, IM, Stat
7. Prepare the parts

Post-Operation Orders

1. Nil By Mouth for 6 ⇨ hrs Clear Fluids ⇨Liquid Diet.
2. IVF Ringer's Lactate
3. IVF Dextrose + Normal Saline @ 80ml/hr.
4. Inj.Augmentin 1.2gm IV, BD
5. Inj. Rantac IV, BD.
6. Inj. Voveran 75mg, IM, BD
7. Inj. Zofer 4mg (SOS)

POD-1

On Examination Patient is Conscious & Coherent, Wound Soakage –ve.

Advice Ambulation of patient & Drain 100ml {Serous+Blood}.

Medications

1. Normal Protein Diet.
2. Inj.Augmentin 1.2gm IV, BD
3. Inj. Zofer 4mg (SOS)
4. Tab. Pan 40mg, PO, OD{before breakfast}.
5. Tab Zerodal SP PO,OD

POD-2

On Examination Patient is Conscious & Coherent, Wound Soakage –ve. Patient didn't pass stool.

Advice Ambulation of patient & Drain 10ml {Serous+Blood}.

Medications
1. Normal Protein Diet.
2. Inj.Augmentin 1.2gm IV, BD
3. Tab. Jespan 40mg, PO, OD{before breakfast}.
4. Tab Zerodal SP PO,OD

Pod-3
On Examination Patient is Conscious & Coherent, Wound Soakage –ve. Patient didn't pass stool.
Advice Ambulation of patient & Drain 5-10ml {Serous+Blood}.ASD Today.
Medications:
1. Normal Protein Diet.
2. Inj.Augmentin 1.2gm IV, BD
3. Tab. Jespan 40mg, PO, OD{before breakfast}.
4. Tab Jesnorm- M PO,OD

Pod-4
On Examination Patient is Conscious & Coherent. Dressing in place. Patient passed stool.

Medications
1. Normal Protein Diet.
2. Inj.Augmentin 1.2gm IV, BD
3. Tab. Jespan 40mg, PO, OD{before breakfast}.
4. Tab Jesnorm- M PO,OD

POD-5
No Fresh Complaints.
On Examination Patient is Conscious & Coherent. Dressing in place.
Medications:
1. Normal Protein Diet.
2. Inj. Augmentin 1.2gm IV, BD
3. Tab. Jespan 40mg, PO, OD{before breakfast}.
4. Tab Jesnorm- M PO,OD

Pod-6,7,8,9,10:
No Fresh Complaints.
On Examination Patient is Conscious & Coherent. Dressing in place. Wound is healthy & no discharge.

Plan for Discharge
Medications
1. Normal Diet.
2. Tab.Rantac 150mg PO, BD
3. Tab. Taxim BD
4. Tab Jesnorm- M PO,OD

Discharge Medications

Form	Drugs	Generic Name	Dose	Route	Frequency
Tablet	Jespan	Pantoprazole	40mg	PO	OD
Tablet	Taxim	Cefexime	200mg	PO	BD
Tablet	Chymoral Forte	Chymotrypsin & Trypsin	100000AU	PO	BD
Tablet	Willgo-P	Aceclofenac & Paracetamol	100/325mg	PO	BD

CONCLUSION
In this case patient discovered big swelling around gluteal region which he noticed was enlarging and reached preanal region before he consulted physician, upon interviewing we found that he was asymptomatic until eight months back, it was cause of concern as the size was enormous and constituency was rigid associated with pain, and the enlargement was within short amount of time since last noticed by the patient, it was upon histological investigation that we found out its benign sarcoma, location of the sarcoma was safe as it will not hinder and surgical procedure nor any complication can be foreseen in the future, pre operative assessments shown that patent has no complications and can proceed for surgery It was not clear to cause sarcoma, genetic may be the cause as patient was still student and young to be exposed to any sort of carcinogen, and no infection was found, Soft Tissue Sacoma of the Left Gluteal Region is characterized by local control, freedom from distant relapse and survival, which is inferior to accepted standards for other pelvic sarcomas. To improve this poor outcome, oncologists are encouraged to regard sarcoma of the Left Gluteal Region as a distinct clinical entity and to devise innovative therapeutic strategies accordingly.

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