

# **International Journal of Research Publication and Reviews**

Journal homepage: www.ijrpr.com ISSN 2582-7421

# A Rare Case Report on Germ Cell Tumor

# Ms. Prerana Sakharwade<sup>1</sup>, Sonali Kolhekar<sup>2</sup>, Khushbu Meshram<sup>3</sup>, Darshana Wankhede<sup>4</sup>, Achita Sawarkar<sup>5</sup>, Madhuri Shambharkar<sup>6</sup>, Archana Taksande<sup>7</sup>

<sup>1,2,3,4,5,6,7</sup>Assistant Professor Smt. Radhikabai Meghe Memorial College of Nursing, Datta Meghe Institute of higher education and research Sawangi (M) (Deemed to be University) Maharashtra, India Email: <u>preranamadhura@gmail.com</u> DOI: <u>https://doi.org/10.55248/gengpi.4.1223.123534</u>

#### ABSTRACT

A neoplasm generated from germ cells is known as a germ cell tumor (GCT). Cancerous and benign germ-cell tumours exist. (1) Germ cells are generally found within the gonads (ovary and testis). Germ cell tumor that originate outside the gonads could be birth abnormalities caused by mistakes during embryo development.(2) A 3-year-old female was admitted in pediatric ward with the complaints of swelling on the right gluteal region, swelling on the right side of the gluteal region, fever, vaginal bleeding, belly pain and swelling, leg pain, sleep disturbance, irritating. She undergoes the investigation and she was diagnosis as Germ cell tumor and treatment was started with the intravenous fluids, analgesic, chemotherapy and the adequate nursing management.

Key word:- Germ cell tumor, child, chemotherapy, malignancy, overiectomy

#### **Introduction :-**

Adult testicular is common paediatric Germ cell tumor in terms of biology and clinical presentation; there are some key differences to be aware of. First, epidemiologic data show that Germ cell tumor incidence has two separate peaks, one in young.

While the histology and molecular biology of Germ cell tumor in adolescents and adults appear to be identical, germ cell tumours in very young children have significant distinctions (discussed below), suggesting that they may be a separate disease. Germ cell tumor account for about 3% of malignancies in children aged 0–18, and their incidence rises with puberty. Germ cell tumor account for 15% of all malignancies in children aged 0–18.During adolescence, one-third of all cancers are diagnosed.

Pediatric Germ cell tumor are treated with Cisplatin based multiagent regimens, which have proven to be highly efficacious even in the setting of advanced disease, similar to adult Testicular Germ cell tumor. However, evidence of negative long-term effects in adult male Testicular Germ cell tumor survivors is growing, including a doubling of the risk of early-onset cardiovascular disease.

#### Patient identification:

A 3-year-old female was admitted. Since 6 months, with chief complaint of swelling on the right gluteal region, swelling on the right side of the gluteal region, fever, vaginal bleeding, belly pain and swelling, leg pain. Her Height: 78Cm and Weight: 10kg

#### **Present medical history**

A 3 years old female was admitted in AVBRH in pediatric ward with chief complaint of swelling on right gluteal region, fever, weakness, irritability, constipation, leg weakness, seen 6 month.

#### Past medical history:

No any past medical history.

#### **Clinical findings :-**

The patient experiencing swelling on right gluteal region, fever, weakness, irritability, constipation, leg weakness, pain.

#### **Diagnostic evaluation**

#### Physical examination

The height of the patient 78cm, the weight is 10kg the blood pressure is 110/70mm of hg, the pulse is 90 beats /min, the respiration is 30 breath /min and the Temperature is 98.6 C. The patient undergoes the investigation of complete blood count and radiology investigation like ultrasonography. The hemoglobin=11.1%, platelet=2.74, total RBC 4.5Millions /cu.mm, WBC count =7000 cu.mm, total protein=6.6, bilirubin =0.4, HCV =Non-reactive.

## Therapeutic intervention:

As soon the patient is diagnosis germ cell tumor chemotherapy

## Nursing management:

Nursing diagnosis

1. Imbalance nutrition pattern less than body requirement.

Nursing intervention	Rationale
1. Assess the level of nutrition pattern Monitor the weight	1. To collect the baseline data about weight loss with the pain
of the patient daily.	perception.
2. Consult the dietician and provide a diet pattern to the	2. To provide the patient with a healthy diet in order to cope up
patient's family to follow.	with daily activities.
3. Check the physician's order and administer antiemetic	3. To provide the patient with health diet in or cope up with daily
and supplementary medicines.	activity.

## 2. Reduce sleeping pattern related to disease condition and hospitalization.

Nursing diagnosis	Rationale
1. Assess the sleeping pattern of the patient.	1. To know the baseline data of the sleeping pattern
2. A maintain clam and quite environment	For well sleep of the patient
3. To give the prescribed medication as per doctor order	To reduce the symptoms

3. Fear and anxiety related to hospitalization secondary related to disease condition.

Nursing diagnosis	Rationale
1. Maintain report with the patient and his family	1. To infuse comfort so that they can share about quires and problem
2.Provide information about the state of the disease	2. To improve the patient and family understanding of disease condition
and treatment options	
3.counsel the patient regarding the mention fear and	3. To prepare the patient and family for treatment.
anxiety	

4. Altered the body temperature related to disease condition.

Nursing diagnosis	Rationale
1. Assess the Vital sign	1. To know the baseline data.
2. Provide cold sponging.	2. To maintain body temperature
3. Provide keep and calm environment.	3. To give the doctor order medicine

#### Follow-up and outcomes:

The findings measured by the clinician and patient:

Significant medical follow-up and other test outcomes:

Adherence to action and tolerability

Unfavorable and unanticipated occurrences:

#### **Discussion:-**

A 3 years old female was admitted in pediatric ward with chief complaint of swelling on right gluteal region, fever, weakness, irritability, constipation, chest pain. After all investigation diagnosed case as Germ cell tumor then started treatment regimen patient condition was stable.

Germ cell tumor is a clinical disorder, which is commonly seen in patients. Cisplatin, Etoposide, and Bleomycin 6–9 are some of the most commonly used chemotherapy medicines today. Our patient took these drugs in addition to surgery, which helped to reduce the size of his tumour.(3)If patients are determined to have a primary tumor or visceral metastases outside of the gluteal region and retroperitoneum, the International Germ Cell Cancer Collaboration Group (IGCCCG) assigns them a poor prognosis. Patients with such a diagnosis had a 6month survival rate of 48 percent.(4)

This case illustrates one of the more uncommon gluteal region germ cell tumor appearances, as well as the diagnostic problems that come with it. Early detection necessitates a high index of suspicion, in child with tumours of uncertain origin. Early detection of this symptom will aid in minimizing the tumor burden as well as the mortality that comes with it. It also enables early treatment, which usually requires surgery (for malignancies that are accessible) and chemotherapy. However, our understanding of these malignancies and their manifestations is limited. (5)

If there is evidence of a bilateral form or if surrounding structures are involved, a laparoscopic biopsy is the best option. In patients with metastatic disease, neoadjuvant chemotherapy is recommended when the initial surgical technique comprises of a biopsy or an excision with micro/macroscopic residues.(5) A post-chemotherapy examination reveals a surgically respectable tumor in the majority of cases. When a tumor is bilateral, the majority of authors advise preserving the ovary on the side with the least involvement. Only when chemotherapy is ineffective are mutilating excisions and bilateral ovariectomies accepted.(6)

#### Reference :-

1. Lobo J, Gillis AJM, Jerónimo C, Henrique R, Looijenga LHJ. Human Germ Cell Tumors are Developmental Cancers: Impact of Epigenetics on Pathobiology and Clinic. Int J Mol Sci. 2019 Jan 10;20(2):258.

2. Germ Cell - an overview | ScienceDirect Topics [Internet]. [cited 2022 Jan 4]. Available from: <u>https://www.sciencedirect.com/ topics/biochemistry-genetics-and-molecular-biology/germ-cell</u>

3. Long-term complications of chemotherapy for germ cell tumours - PubMed [Internet]. [cited 2022 Jan 4]. Available from: https://pubmed.ncbi.nlm.nih.gov/12887263/

4. Treatment Options for Testicular Cancer, by Type and Stage [Internet]. [cited 2022 Jan 4]. Available from: <u>https://www.cancer.org/cancer/testicular-cancer/treating/by-stage.html</u>

5. sip\_52.pdf [Internet]. [cited 2022 Jan 4]. Available from: https://www.rcog.org.uk/globalassets/documents/guidelines/scientific-impact-papers/sip\_52.pdf

6. Ontaneda D, Fox RJ. Progressive multiple sclerosis. Curr Opin Neurol. 2015 Jun;28(3):237-43.