



# Reproductive Function After Management of Malignant Ovarian Germ Cell Tumours.

**KEYWORDS**

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**Introduction:**

- Germ Cell Tumors
- derived from the **primordial germ cells** of the ovary
- 20% to 25% of ovarian neoplasms
- only about **3%** of these tumors are **malignant**
- Usual age of presentation is **1<sup>st</sup> & 2<sup>nd</sup> decade** of life
- 70% of ovarian tumors in first two decades are of germ cell origin and one third of these are malignant

**Dysgerminoma** is the most common malignant germ cell tumor

**AIM:**

To evaluate the reproductive outcome after fertility preserving surgery and combination chemotherapy in Malignant Ovarian Germ Cell Tumours

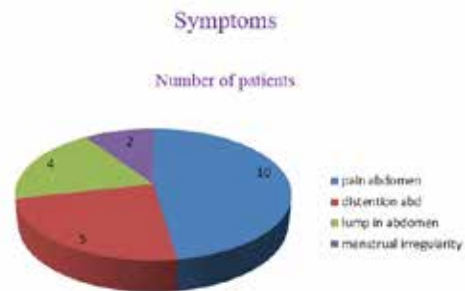
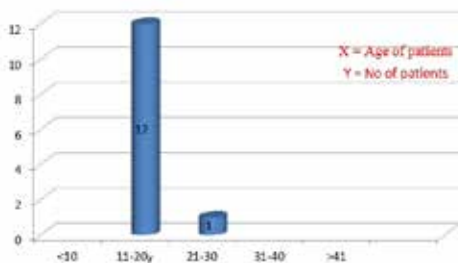
**Materials and methods:**

Study design: Retrospective  
 Duration: 4 years (cases from 2009-1011 were studied with follow up over 2 years)  
 Center : Tertiary  
 Sample size: 13 cases  
 Factors studied:  
 1) Age  
 2) Signs and symptoms  
 3) Menstrual and Obstetric history  
 4) Surgical and medical management  
 5) Histopathology  
 6) Menstrual and reproductive outcome  
 All patients were observed for menstrual and reproductive function and for disease free survival after the treatment

Median **follow up** time was **36 months**

**Results**

Age distribution



**Histopathology**

Histology	No of patients	Percentage
<b>Dysgerminoma</b>	<b>5</b>	<b>38.46 %</b>
Endodermal sinus tumour	5	38.46 %
Immature teratoma	2	15.18 %
Mixed germ cell	1	7.69 %

Stage	No of patients
Ia	3
Ib	-
<b>Ic</b>	<b>6</b>
IIa	-
IIb	2
IIc	-
IIIa	-
IIIb	-
IIIc	2
IV	-

**Stage and chemotherapy**

Stage	No of patients	Adjuvant chemotherapy (no of cycles)	Response	2 <sup>nd</sup> line chemotherapy (no of cycles)
Ia	3	BEP(3)	CR	-
Ic	6	BEP(3)	CR	-
IIb	2	BEP(3)	CR	-
IIIc	2	BEP(4)	CR	-

**Follow up**  
(Median follow up time was 36 months)

Disease status	No of patients
Free of disease	13(100%)
Patient with disease	-

**Menstrual status**

Menstrual cycle	No of patients
Retrieval of regular cycle	13 (100%)
Not retrieved	-



Total number of women trying for pregnancy: 9

Number of pregnancies: 3

Pregnancy outcome: FTND with 4 live births (one twin delivery)

**Comparison study**

No of pregnancy	Koji et al study
3/9	4/20

**Conclusion:**

Irrespective of subtype and stage, conservative surgery, with adjuvant chemotherapy as indicated, is the standard approach to treat patients with malignant ovarian germ cell tumors.

Survival rate is excellent in germ cell tumour.

Women who had fertility preserving surgery were very likely to retain menstrual function and fertility.

**REFERENCE**

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