The Prevalence & Age Distribution of Ovarian Cysts

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A prospective study conducted at Lady Willingdon Hospital LHR over two years for prevalence & age distribution of ovarian cyst. According to study 85% ovarian cyst were benign, 13 % cyst were malignant while 2% were borderline malignant. The commonest histopathological type was serous cystadenoma. Only age was not the determining factor for the type of the ovarian cyst.
Key words: Ovarian cyst, age distribution

Ovarian cysts may be physiological or pathological. They may arise from any tissue in the ovaries. Most ovarian tumors are cystic & the finding of solid element makes malignancy more likely. Ovarian tumors are common cause of hospital admission. Ninty percent of ovarian tumors are benign, although this varies with age. Cancer of the ovary is an enigmatic disease. It classically presents in middle-aged women at a very late stage. Its insidious onset is often mistaken. The vague symptomatology put down to tummy upset or indigestion. Some 75% of patients will present with the disease already in later stage (stage III or stage IV). [1] Among the surgically managed cases the frequency of malignant tumors is 13% in premenopausal women[2]. In the study conducted at unit III Lady Willingdon hospital during mentioned period the prevalence of ovarian cyst & the age distribution was counted.

Patients & methods:

A prospective study was conducted at Lady Willingdon hospital Lahore from January 2003 to December 2004. Lady Willingdon hospital is the teaching hospital affiliated with King Edward Medical College Lahore. During the mentioned period according to inclusion criteria, patient's evaluation was done on a designed performa. The patient with clinical or ultrasound diagnosis of ovarian mass were evaluated .Total 196 women who had ovarian tissue removed were included in the study. The list identified 165 ovarian cysts in the study. The list was crosschecked with the histopathology reports in the patient's hospital notes. The ovarian cysts were grouped according to WHO classification[3]

Results:

The prevalence of each diagnostic group is expressed as the number of cyst in that diagnostic group/ number of women (n=196), and the number of cyst in that diagnostic group/total number of cyst (n=165). According to results there were 140(85%) benign cyst, 3 borderline malignant cyst (1.8%) and 22(13%) malignant cyst. Serous cystadenoma were the most prevalent single diagnostic group among benign ovarian cyst in 51 patients, endometriotic cyst in 26 patients, follicular/ corpus luteum, hemorrhagic cyst in 11 patients, mucinous cystadenoma in

22 patients and teratoma (dermoid cyst) in 30 patients. The malignant cyst were adenocarcinoma in 18 patients, giant cell tumor in 2 patients, granulose cell tumor in one patient and carcinoid tumor in one patient.

Table:1 The prevalence and age distribution of ovarian tumor

Histological diagnosis	No.of cysts	N/ women (196)%	N/ cyst (165) %	Median age (Yrs)
Serous cystadenoma	51		31	50
Dermoid cyst	30	15	18	30
Endometeroid cyst	26	13	16	42
Mucinous cystadenoma	22	11	13	38
Follicular cyst	11	5.6	6.6	32
Border line maligr	3	1.5	1.8	55
Malignancy	22	11.2	13	61

Table:2 Malignant cyst type

Histopathological type	=n	% age
Adenocarcinoma	18	82
Giant cell tumor	2	9
Granulosa cell tumor	1	4.5
Carcinoid tumor	1	4.5

Table: 3 Difference in the median age

	Enndo-metriomas	Other cyst	Serous cyst	Mucinous cyst	Malignant cyst
Other cyst	N				
Serous Cystadenoma	S	S			
Mucinous cystadenoma	N	N	S		
Dermoid Cyst	N	N	S	N	
Malignant Cyst	S	S	N	S	S
Border line Cyst	N	S	N	N	S

S=significant   N=not significant

Discussion:

Ovarian cyst is relatively silent in development. Symptoms are usually vague. As consequences is either ignored for a considerable period of time or when taken note, inappropriate referral is common. The prevalence of ovarian cyst is different in different age group. According to table 3, any of the diagnostic groups can be compared.

For example, to determine whether there is significant difference between the median age of women with an endometerioma and women with serous cystadenoma. The S shows the significant difference. The distribution of the cyst type is shown in table1. The distribution of cyst types in the study is similar to the reported in different studies[4,5,6,7]. It is also shown by the study that age alone can not be used to distinguish one cyst type from the other group. It is shown by the study that most of the ovarian tumors are epithelial in origin. Malignant cysts are rare before the age of 35 years but the incidence increases with the increasing age. The peak incidence is in the old age group. This is shown in the study. This also relates to the already published study[8].

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