

Brenner

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=Abstract=

The Brenner Tumors of The Ovary: A Clinicopathologic Study

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The aim of this study was to evaluate the clinicopathologic findings of twelve patients with Brenner tumor of the ovary diagnosed and treated in the department of Gynecology and Obstetrics, University of Ulsan, Asan Medical Center for nine years.

Demographic characteristics, symptoms, signs, stage, tumor grade, mode of therapy and results of follow-up were reviewed retrospectively.

The patients with Brenner tumor constituted 0.54% of all epithelial ovarian tumor encountered during this period. The age of patents ranged from 47 to 79 years (mean \pm S.D.; 60.1 ± 11.9) and the mean parity was 3.3. Eleven cases except one, who had FIGO stage Ia disease, had benign tumors. The tumor size ranged from 0.5 to 12 cm (mean \pm S.D.; 4.8 ± 3.8 cm). Uterine adenomyosis was the most frequently associated disease (58.3%) and all tumors were unilateral. Total abdominal hysterectomy with unilateral or bilateral salpingoophorectomy were performed in all patients and no further postoperative adjuvant treatments were done even in the patient with malignant tumor, who is alive without evidence of disease.

Keywords: Brenner tumor

Brenner 1898 MacNaughton-Jones)

가

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1989 6 1998 5

Brenner

1963 2 13 12

1 2

7 (58.3%), 가 4 (33.3%),
2 1
(Table 1). CA 125 4
3.1 45.5 U/ml
45.5 U/ml
Brenner 1
12
2.
12
가
7
2
1
1.
Brenner 1 2 Brenner
0.54% 1
가 5 가 4 ,
2 , 가가 1 FIGO
47 79 Ia
60.1 ± 11.9 (mean ± S.D.) 3.
1 9 3.3 ± 2.6 8 (66.7%) 1 12 cm
4.8 ± 3.8 cm(mean ± S.D)

Table 1. Clinical characteristics of 12 patients with Brenner tumor

Case No.	Age	Para	Sx. and Signs	Op Indication	Op. name	Follow-up(Mo.)
Benign						
1	47	1	No	myoma ut, CIN	TAH, LSO	5
2	47	2	dysmenorrhea	myoma ut	TAH, LSO	11
3	47	2	menorrhagia	myoma ut	LAVH, BSO	3
4	53	2	No	myoma ut	TAH, BSO	4
5	60	2	vag. spotting	cervical cancer b	RH, BSO	24
6	61	6	No	cervical cancer b	RH, BSO	14
7	66	4	vag. spotting	myoma ut, ov. tumor	TAH, RSO	4
8	66	1	No	myoma ut	TAH, BSO	16
9	73	7	abdominal discomfort	ov. tumor	TAH, BSO	2
10	75	9	No	ov. tumor	BSO	5
11	79	2	vag. spotting	ov. tumor	TAH, BSO	3
Malignant						
12	47	2	vag. spotting	myoma ut, ov. tumor	TAH, BSO	3

Para: parity; Sx.: symptom; Op.: operative; Mo.: months; myoma ut: uterine myoma; CIN: cervical intraepithelial neoplasia; TAH: total abdominal hysterectomy; LSO: left salpingoophorectomy; LAVH: laparoscopy-assisted vaginal hysterectomy; BSO: bilateral salpingoophorectomy; vag. spotting: vaginal spotting; ov. tumor: ovarian tumor

Table 2. Pathologic Findings of Benign Brenner Tumor

Case	Maximal diameter of tumor(m)	Gross. app.	EM pathology	Ass. pathology
Benign				
1	0.5	solid	atrophic	adenomyosis
2	5	solid	proliferative	adenomyosis
3	1.5	solid	proliferative	leiomyoma, adenomyosis
4	0.5	solid	secretory	leiomyoma, adenomyosis
5	3.5	solid	atrophic	cervical cancer(SCC)
6	1.2	solid	atrophic	cervical cancer(SCC)
7	10	solid	atrophic	none
8	3	solid	atrophic	ov. mucinous cystadenoma
9	6	solid	atrophic	ov. mucinous cystadenoma
10	12	cystic	atrophic	none
11	6.5	solid	atrophic	ov. mucinous cystadenoma
Malignant				
12	6	cystic	decidual change	none

app.: appearance; EM: endometrial; Ass.: associated; SCC: squamous cell carcinoma

10 , 2
(transiti-
onal cell)
coffee bean
(lipid cell)가
(Fig. 1). Brenner
(stromal invasion)
(Fig. 2). 9 (75%)
3
(mucinous cystadenoma) (Fig. 3),
4
8 (atrophic)
2 (proliferative), 1
(secretory)
(decidual change)
6 cytokeratin(CK) 7, cytokeratin(CK) 20
6
CK 7 , CK20

Fig. 1. Benign Brenner tumor with characteristic epithelial nest and surrounding stroma (H & E, ×200).

4.
Brenner
8.7(±6.9)
가 Ia 가
12

Fig. 2. Malignant Brenner tumor showing stromal invasion with vague basement membrane (H & E, ×100).

epithelial) " .7)
 (stromal invasion) 가
 " (proliferating)" "
 (borderline)" Brenner .
 Brenner
 1985 Roth
 .8)
 30 60
 49 53 , 64
 9)

Fig. 3. Benign Brenner tumor with mucinous cystadenoma (H & E, $\times 100$).

Brenner 1898 MacNaughton Jones1)
 1907 Brenner 79 Brenner 47
 "Brenner" . S.D.) 1 38 60.1 \pm 11.9 (mean \pm
 가 Brenner 가
 가 가
 2% 2 5% 가
 .34) 가 ,9) 가
 Brenner (granulosa cell tumor) 5
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 (follicular epithelium), (celomic epi-
 thelium), (teratoma), (urothelium)
 (rete ovarii) 가 11,12)
 .13)
 가
 Von Numers ,14) Brenner
 .15,16) 가
 2 1
 , 1
 ,
 (atrophic)
 ,56) 가
 Brenner 가
 가
 1973 WHO Brenner
 " (transitional cell)
 free bean co-
 (fibro- mbryonic antigen)가
 CA 125 CA 19-9
 가 가
 가
 CEA(carcinoe-
 가

CA 125 CA 19-9
 .818) prekeratin
 nner 가
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.8) 가
 6 cytoke-
 ratin .2627)
 가
 CK7 , CK20 .28)
 .19) 10242930)
 Brenner Brenner
 20 cm , 가
 2 cm 10 cm
 .14) 1 Brenner
 4.8 ± 3.8 cm(mean ± S.D.) 가 Ia
 0.5 cm 12 cm 10 cm
 2

Brenner
 가 1
 5 70% ,
 0% .31) 가
 .9) 3.7 8% ,3) 가
 가

(transitional cell
 tumor)
 (transverse groove)가
 “coffee bean”
 .20)
 가 ,
 가
 3621) 가
 .223)
 Brenner
 6223)
 212426)

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 .16) Brenner
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 Bre-
 nner

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