

## SYNCYTIAL ENDOMETRITIS

(A retrospective study of 57 cases in 20 Years)

By

NEELU GUPTA, ROOPAM KALRA, P. M. SAREEN AND V. B. KALRA

### SUMMARY

57 cases of syncytial endometritis during a period of 20 years viz 1964 to 1984 were studied. The incidence in relation with normal pregnancy was 1:1825. Maximum cases were seen in 21-30 yrs age group and mean age was 25.3 years. Multiparous women were commonly affected (40.32% cases in P-P). The commonest symptom was bleeding per vagina (43 cases, 75.43%) followed by irregular periods (8.77%), pain abdomen (7.00%), irregular fever (3.50%) and secondary sterility (1.75%). Clinically the commonest diagnosis made was F.U.B. (29 cases, 50.87%). Histologically mononuclear and multinuclear cells were seen scattered irregularly without forming solid mass which can be mistaken for malignancy.

### Introduction

Marchand, 1895 first introduced the new term "atypical choriocarcinoma" an unusual lesion. Ewings (1910) divided atypical choriocarcinoma of Marchand into syncytial endometritis and syncytioma. Later on Ober (1965), Park (1971), Elston (1972) and Kurman (1976) used the term "trophoblastic pseudotumor" for syncytioma. The term syncytial endometritis is used to indicate normal placental site reaction characterised by mild infiltration of mono or multinuclear trophoblastic cells (syncytiotrophoblast) appearing bland with little or no mitotic activity and not growing confluent to

form a mass lesion, scattered in endometrium or splitting myometrial muscle fibres without destroying them. As there is paucity of literature on syncytial endometritis the present study was undertaken to assess clinical/histological features of this entity.

### Material and Methods

The present study has been carried out on 57 cases of syncytial endometritis diagnosed histopathologically and registered in the Department of Pathology, S.P. Medical College, Bikaner from 1964 to 1984. Clinical information was recorded on a proforma and 5 $\mu$  thick paraffin sections were stained with Haematoxylin and Eosin (H & E) and other stains like Periodic Acid Schiff's stain (P.A.S.), Reticulin stain (R.S.) and Masson's Trich-

*From: Department of Pathology and Gynaecology and Obstetrics, S.P. Medical College, Bikaner.*

*Accepted for publication on 5-10-87.*

rome stain (M.T.) whenever required for histochemical study.

marriage, literacy and socio-economic conditions in different areas.

*Observations and Discussion*

The present study was conducted on 57 cases of syncytial endometritis during period of 20 years viz. 1964 to 1984. The incidence in relation with normal delivery was 1:1825 which is considerably higher when compared to the incidence (1:5009) reported by Paranjothy (1968). During this 20 years period total 178 cases of trophoblastic disease were reported. Thus the incidence of syncytial endometritis was 32.02% of total trophoblastic diseases.

Table I shows that maximum number of cases were seen in 21-30 years age group and mean age was 25.3 years which is roughly similar to the age reported by Elston (1981) and Driscoll (1984).

TABLE I  
*Showing Age Distribution in Syncytial Endometritis*

S. No.	Age in years	No. of cases	Percentage
1.	0-10	0	0.00
2.	11-20	15	26.31
3.	21-30	27	47.36
4.	31-40	13	22.83
5.	41-50	02	3.50
Total		57	100.00

Mean Age—25.3 years.

Maximum number of cases (40.32%) were present in multiparous women viz., P<sub>2</sub>-P<sub>8</sub> (Table II) which is almost similar to results reported by Kalyanikutty and Nalini (1970). The reported figures range widely from 18.70% (Marquees, 1963) to 70% (Radha *et al*, 1971). These variations may be related to differences in age of

TABLE II  
*Showing Parity Distribution in Syncytial Endometritis*

S. No.	Parity	No. of cases	Percentage
1.	P <sub>0</sub> -P <sub>1</sub>	15	26.35
2.	P <sub>2</sub> -P <sub>8</sub>	23	40.32
3.	P <sub>4</sub>	02	3.50
4.	P <sub>5</sub> or above	05	8.77
5.	Unknown	12	21.06
Total		57	100.00

The commonest symptom (Table III) was bleeding per vagina in 43 cases (75.43%) which is almost similar to the results of Radha *et al* (1971) and Sen Gupta and Chaudhary (1979). Other clinical features were irregular periods (8.77%), pain in abdomen (7.00%), irregular fever (3.50%) and secondary sterility (1.75%).

Syncytial endometritis is frequently misdiagnosed as some other condition on gynaecological examination (Table IV). F.U.B. was diagnosed clinically in 29 cases (50.87%). Other diagnoses were incomplete abortion (19.28%), Vesicular mole (7.00%), Erosion Cervix (7.00%), placental polyp (7.00%), Ovarian tumor (1.75%) and missed abortion (1.75%).

Grossly all tissues appeared as multiple grey brown irregular soft tissue pieces with blood clots. No grape like structures were seen. On histological examination (Fig. 1) all cases showed mononuclear syncytiotrophoblastic cells and 8 cases showed multinucleated giant cells. Syncytial endometritis must be differentiated from Placental site Trophoblastic Tumors by cytologic features. The cells in syncytial endometritis are bland with less than 2 mitotic figures per 10 high power fields

TABLE III  
Showing Clinical Features in Syncytial Endometritis

S. No.	Clinical features	No. of cases	Percentage
1.	<i>Vaginal Bleeding</i>		
	— Less than 10 days	05	8.77
	— 10 to 20 days	16	28.07
	— 20 days to 3 months	22	38.59
	— 3 to 5 months	nil	nil
	Total	43	75.43
2.	Irregular periods	05	8.77
3.	Pain in abdomen	04	, 00
4.	Irregular fever	02	3.50
5.	Secondary sterility	01	1.75

TABLE IV  
Showing Clinical Diagnoses in Syncytial Endometritis

S. No.	Clinical Diagnosis	No. of cases	Percentage
1.	F.U.B.	29	50.97
2.	Incomplete abortion	11	19.28
3.	Vesicular mole	04	7.00
4.	Erosion Cervix	04	7.00
5.	Placental Polyp	04	7.00
6.	Ovarian tumor	01	1.75
7.	Missed abortion	01	1.75
8.	Unknown	03	5.25
	Total	57	100.00

(Young *et al*, 1984). It should also be distinguished from decidual cells by presence of high RNA content and unlike decidual cells, in syncytial endometritis the cells are not individually invested by skin of reticulin.

It has been stressed in literature (Novak *et al* 1979) that syncytial endometritis is a very common observation on endometrial curettage in cases of hydatidiform mole or abortion and is not to be mistaken for malignancy (Elston, 1981). Recently Driscoll (1984) suggested that following delivery deep endometrium and superficial myometrium contain tro-

phoblast which regresses over ensuing 2 or 3 weeks.

#### References

1. Driscoll, S. G.: Clinics of Obstet. Gynec. 27: 160, 1984.
2. Elston, C. W. and Bhagshwa, K. D.: J. Obstet. Gynec. Brit. C'wealth. 79: 717, 1972.
3. Elston, C. W.: Recent advances in Histo-pathology, 11: 149, 1981.
4. Ewings, J.: Surg. J. Obstet. Gynec. 10: 366, 1910.
5. Kalyanikutti, P. and Nalini, V. I.: J. Obstet. Gynec. India, 20: 480, 1970.
6. Kurman, R. J., Scully, R. E. and Norms, H. J.: Cancer, 33: 1214, 1976.

7. Marchand, F. (1985): Quoted by Fox, H., Elston, C. W. and Benington, J. in Pathology of Placenta, Vol. VII. W. B. Saunders Company Ltd., London, 368, 1978.

8. Marquez, M. H., Delavega, G., Robles, M. et al: Am. J. Obstet. Gynec. 85: 856, 1963.

9. Novak, R. E., Jones, S. G. and Jones, W. H.: Text Book of Gynaecology, 10th ed., Williams and Wilkins, London, p. 587, 1979.

10. Ober, W. B. (1965): Quoted by Fox, H. et al (Reference No. 7)\*

11. Paranjothy, D.: J. Obstet. Gynec. India, 18: 976, 1968.

12. Park, W. W.: Choriocarcinoma. A study of its Pathology, London, Heinemann, 478, 1971.

13. Radha, S., Rajesekharan, V. and Kalyanikutty, P.: J. Obstet. Gynec. India, 20: 496, 1971.

14. Sengupta, A. and Chaudhary, S.: J. Obstet. Gynec. India, 29: 1032, 1979.

15. Young, H., Robert, E. and Schully: Clinics of Obstet. Gynec. 27: 248, 1984.

See Fig. on Art Paper II