

HYDATIDIFORM MOLE—A CLINICO-PATHOLOGICAL STUDY OF 150 CASES

by

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Although the clinical and pathological details of trophoblastic tumours have often been the subject of many analytical studies, one does find them to be presenting some interesting features calling forth a fresh study on the subject. We wish to present our experience with 150 cases of hydatidiform mole with detailed discussion on some aspects worthy of comment.

Material and Methods

All cases of hydatidiform mole diagnosed and operated upon during the year 1960-1970 were analysed and the data are presented. An evaluation is attempted regarding the incidence, maternal age, parity and important clinical features like period of amenorrhoea, bleeding per vaginam, height of the uterus, associa-

tion of pre-eclamptic toxæmia, in these cases. A detailed discussion is given on the rarer aspects of hydatidiform mole, like the incidence of mole after menopause, the occurrence of vaginal nodule in benign hydatidiform mole, recurrent mole, co-existing normal placenta or/and foetus with hydatidiform mole, and the presence of mole in tubal pregnancy.

Observations and Discussion

The incidence of hydatidiform mole in relation to total number of pregnancies varies from 1 in 191 to 1 in 589 in the Indian literature, (Bhaskar Rao, 1970) and our figure is found to be 1 in 326. The same worker has found no correlation with age and parity. Table I and Fig. 1

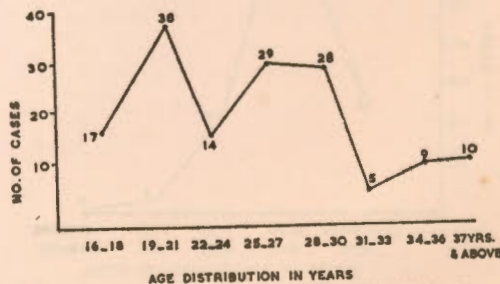


FIG. 1. AGE INCIDENCE IN 150 CASES OF HYDATIDIFORM MOLE.

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Received for publication on 28-1-72.

TABLE I

Correlation Between Age and Parity in 150 Cases of Hydatidiform Mole

Age Group	Parity						Total	%
	O	I	II	III	IV	V and above		
15-20 yrs.	28	19	7	-	-	-	54	36
21-25 yrs.	3	5	17	11	-	-	36	24
26-30 yrs.	1	3	2	16	10	6	38	25.3
31-35 yrs.	-	-	-	3	1	8	12	8
36-40 yrs.	-	-	-	1	1	7	9	6
Above 40	-	-	-	-	-	1	1	0.7
Total	32	27	26	31	12	22	150	
Percentage	21.3	18	17.3	20.7	8	14.7		

show the age and parity incidence in our series. The incidence in primigravida and primipara was 39% which is slightly higher than the 25% incidence in primipara stated by Haines and Taylor (1962). It has been the opinion of most of the workers that age and parity do not seem to be contributory to the occurrence of hydatidiform mole. Clinical diagnosis was made in all the cases except the one where it occurred in a tubal pregnancy. Figs. 2, 3 and 4 show the clinical correlation with the classical symptomatology. 66% of the patients came with amenorrhoea of more than 3 months and in 2.6% it was

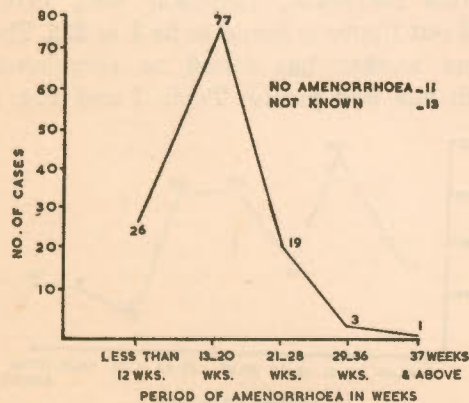


FIG. 2 PERIOD OF AMENORRHOEA ON ADMISSION IN 150 CASES OF HYDATIDIFORM MOLE.

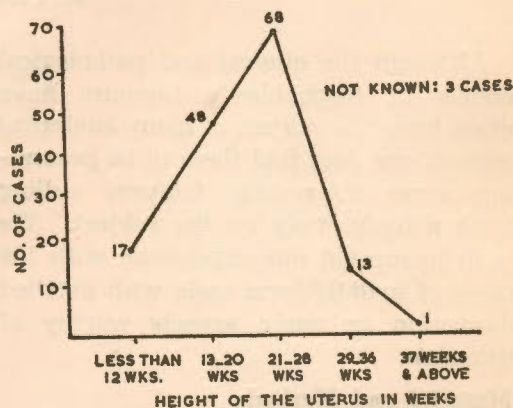


FIG. 3. HEIGHT OF THE UTERUS ON ADMISSION IN 150 CASES OF HYDATIDIFORM MOLE.

for more than 7 months. The longest in our series was a 30 year old patient who came with 10 months' amenorrhoea with 18 weeks' size of the uterus after 6 normal full term deliveries. It is interesting to note that 7% of them had no amenorrhoea at all; one presented as an acute abdomen (tubal hydatidiform mole), 4 complained of irregular spotting during a variable period upto 2 months, and one patient reported to be having scanty periods for the last 2 months; in 8.6% cases this data could not be given by the patient.

78% had the uterine height corresponding to 13-28 weeks' of pregnancy and, in 9%, the height was above 29 weeks. The

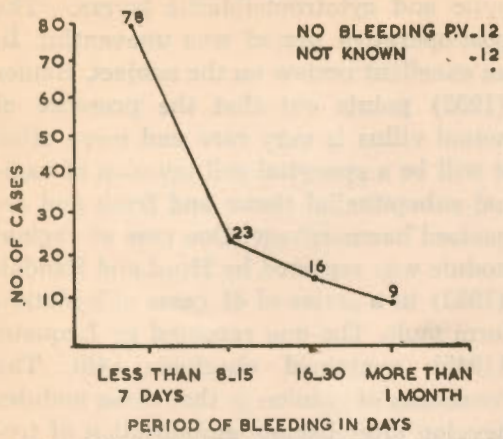


FIG. 4. PERIOD OF BLEEDING P.V PRIOR TO ADMISSION IN 150 CASES OF HYDATIDIFORM MOLE

highest recorded in this series was 34 weeks in a 19 year old primigravida. The uterus had disproportionate enlargement compared to the period of amenorrhoea in the series of many workers, ranging from 51.3% to 74% (Bhaskar Rao, loc cit, 1970) and ours had the incidence of 55%. Incidence of pre-eclamptic toxamia was 9.6% in our series. The duration of vaginal bleeding was for less than 7 days in 52% of the patients and the longest encountered in these was for 3 months.

The results of histological grading is given in Fig. 5 with 73% incidence of

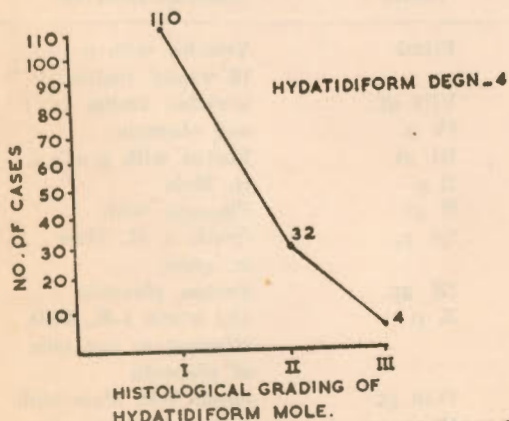


FIG. 5. HISTOLOGICAL GRADING OF 150 CASES OF HYDATIDIFORM MOLE.

grade I. The criteria used was the classification of Hertig and Mansell (Novak, 1967) of apparently benign (Grade I), potentially malignant (Grade II-III) and apparently malignant (Grade III) moles. In fact the grade III hydatidiform moles were treated as invasive moles. None of these cases have so far been admitted in this hospital for choriocarcinoma. Four cases were grouped as hydatidiform degeneration in spite of a clinical diagnosis of molar pregnancy, as the vesicles were smaller with minimal trophoblastic cell proliferation.

Hydatidiform Mole in a Menopausal Woman

A 52 year old woman admitted with the complaint of bleeding per vaginam since the last 2 years. She had attained menopause 3 years ago. She had no other complaints. On examination, the uterus was 14 weeks' size. A diagnostic dilatation and curettage was done and vesicles were obtained. The mole was evacuated. Histologically it turned out to be grade II. Though the occurrence of hydatidiform mole after menopause is very rare, a few cases are on record. (Gaetane and Labriola 1953; Moore and Forks, 1955). The explanation must remain with the erratic behaviour of the ovaries soon after menopause and perhaps will encounter as much difficulty in theorisation as in the occurrence of moles in very small children (Bobrow and Friedman, 1957).

Hydatidiform Mole in a Tubal Pregnancy

This occurred in a 35 year old woman who was admitted as a case of acute abdomen with bleeding per vaginam and lower abdominal pain for 2 days. Exploratory laparotomy revealed a mass located in the right pelvic region which had ruptured into the peritoneum and was diag-

nosed as? ectopic pregnancy,? appendicular abscess. The patient expired the next day. The material sent for histology showed the structure of fallopian tube with chorionic villi, most of which presented a picture of Grade I hydatidiform mole. Novak and Woodruff (1967) comment in their book that it must be more than focal hydatidiform degeneration of the villi for this diagnosis to be made.

Hydatidiform Mole With Vaginal Nodule

This interesting finding occurred in a 30 year old woman who was a 7th gravida, 6th para, with a history of 4 months' amenorrhoea. The uterus was 24 weeks' in size and a diagnosis of hydatidiform mole was made. Hysterectomy was performed. A grade I mole was diagnosed microscopically. On examination, it was further noticed that she had a small bluish vaginal nodule and this was biopsied. Histopathology revealed this to be a haemorrhagic cystic space containing one small chorionic villus with well developed syn-

cytic and cytotrophoblastic layers. The post-operative period was uneventful. In an excellent review on the subject, Haines (1955) points out that the presence of actual villus is very rare and more often it will be a syncytial cell invasion of vaginal subepithelial tissue and fresh and organised haemorrhage. One case of vaginal nodule was reported by Hunt and Randall (1953) in a series of 41 cases of hydatidiform mole. The one reported by Laqueur (1945) contained chorionic villi. The consensus of opinion is that these nodules develop after haemic embolisation of trophoblastic cells and may even regress if the mole is evacuated. Presence of chorionic villi in these nodules is evidence against, though not entirely excluding, choriocarcinoma (Novak, 1954).

Hydatidiform Mole with Normal Placenta and Foetus

We have in our records, 5 cases of hydatidiform mole with co-existing normal placenta and foetus. The details are given in Table II. This occurrence is recorded

TABLE II

Details of 6 Cases with co-existing Hydatidiform Mole and Normal Pregnancy

Sl. No.	Biopsy No.	Age	Parity	Material received
1.	881/65	17	Primi	Vesicles with a 16 weeks' foetus
2.	1509/65	30	VIII gr. IV p.	Vesicles, foetus and placenta
3.	1802/69	23	III gr. II p.	Foetus with grade I H. Mole
4.	957/62	19	II gr. 1st p.	Placenta with Grade I, H. Mole in areas
5.	629/63	40	IX gr. X p.	Foetus, placenta and grade I-H. Mole attached to one pole of placenta
6.	731/63	30	IVth gr. IIIrd p.	Grade I-H. Mole with gastrointestinal tract of foetus

by Lt. Ruffolo (1956) and Brown (1957) Partial degeneration of an otherwise normal placenta indicates single pregnancy, whereas co-existence of foetus with a hydatidiform mole is taken as indicating presence of twins, with abnormality of one of them.

Recurrent Hydatidiform Mole

The patient was 26 year old who had a first full term normal delivery, 2nd hydatidiform mole with instrumental evacuation, 3rd and 4th full term normal deliveries, with 5th again a molar pregnancy. This was evacuated on 22-10-1967 and the subsequent parity is not known. Many reviews are available in the literature of recurrent moles (Posner *et al*, 1955; Hsu, 1963) with report of an unfortunate woman who had all her six pregnancies as moles. (Husel 1965). It is the general experience that recurrence does not necessarily indicate increased malignancy and each is to be evaluated carefully before coming to a hasty conclusion.

We have two cases on record where the women had molar pregnancy after repeated abortions, and another case where a mole was the outcome after 4 previous dead born babies.

Summary

A clinicopathological correlation is attempted in 150 cases of hydatidiform mole and some interesting aspects are discussed in detail.

Acknowledgements

We wish to thank the Principal JIPMER for allowing us to publish these observations.

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