HYDATIDIFORM MOLE — AN ALARMING HEALTH PROBLEM IN MANIPUR

(A Preliminary Study)

by

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Introduction

Till very recently, the State of Manipur was unlisted in all the fields of Medical research and health statistics specially with regard to the incidence of diseases prevailing in our Country. Hydatidiform mole occurs in all the countries of the world with variable incidence at different places. High incidence being recorded in Taiwan (Wei and Ouyang, 1963) and Philippines (Acosta-Sison, 1957), and a comparatively lower incidence in India (Das, 1956; Bhaskar Rao, 1961). In Manipur state the incidence of this disease is high, being 1 in 133 pregnancies. The unexpectedly high incidence of hydatidiform mole and extremely low incidence of chorio-carcinoma in this State encouraged us to bring out this paper.

Material and Method

A total of 15,517 pregnant women at different stages of pregnancy were examined in the Women Hospital, Manipur during the year 1971 to 1974. The total number of deliveries during that time was 4367 in the said hospital. During the same period, 116 cases of hydatidiform mole of different ages and parity detected and treated (Tables I and II) giving the incidence as 1 in 133.7 pregnancies (Table III). Eighty-seven of them reported for vaginal bleeding during early months of pregnancy, 11 for discomfort in the lower abdomen, 18 for severe hyperemesis and fever. Of these, 79 expelled molar tissues after admission during the observation phase. All of them had a common feature like anaemia, loss of weight and poor health standard.

TABLE I

Age

Age	Number of cases	Percentage
Up to 20 Years	13	9.55
20 to 30 Years	89	65.41
30 to 40 Years	25	18.38
Above 40 Years	9	6.61

TABLE II

Parity Incidence

Parity	Number of Cases	Percentage
Nulliparous (1 had abortion)	21	15.44
Mulliparous (13 had abortion)	115	84.56

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TABLE III
Incidence of Hydatidiform Mole in Women Hospital, Manipur

Year	Pregnancies Attending Hospital	Deliveries	Abortion	Total number	Pregnancies per more Incidence
1971	2521	884	507	14	180.1
1972	2626	891	585	22	119.4
1973	6401	989	698	57	112.6
1974	3969	1603	735	23	172.6
Total	15517	4367	2525	116	133.7

In 93 of the cases the diagnosis was not a problem because the mole expelled spontaneously at 9-14 weeks in the hospital itself and 23 of them underwent pregnosticon* "All-in" quantitative test along with other investigations because of diagnostic uncertainty and big size of the mole. All of them had X-ray chest, abdomen, (P.A. view) routinely. Routine immunological examination could not be done as there is no such facility in this State.

Management

All the 93 cases were treated by dilatation of cervix and evacuation after I.V. & I.M. Methergin pre-operatively and 23 cases failed therapeutic induction (Syntocinon/Pitocin upto 1 in 100) and were subjected to hysterotomy 15 of them had ligation. Three cases had second curettage for repeated bleeding episode from incomplete evacuation. One case of 28 years underwent bilateral ovariotomy due to gross ovarian pathology (cystic and twisted). All the cases had antibiotic cover and blood transfusion.

They have been subjected to routine follow-up proceedure, as accepted. So far 89 cases had pregnancy with normal deliveries by now, against the advice of contraception. One had choriocarcinoma after 14 months of the molar incidence. The rest are keeping good health.

In 1978 another 20 molar cases were studied to co-relate their nutritional and haematolcgical status. Study of serum iron, iron-binding capacity, total protein, total R.B.C., P.C.V., M.C.V., M.C.H. and M.C.H.C. etc. investigated (Table IV) on the basis of their income and food habits (Table V).

Results

The incidence of hydatidiform mole in this State is highest in India, 1 in 133.7 pregnancies comparable with Burma, Philippines and Taiwan, the vulnerable age group being 20-30 years. Nutrition and poor health care might be contributory in the early stage of pregnancy leading to ischaemia of the trophoblastic tissues and poor nutritional supply from hormonal imbalance and malnutrition (Stone *et al*, 1976; Dawood and Ratnam, 1971). Out study suggests involvement of dietary habits and ethnic variation in the population of this State. Thus fertility and socio-economic status seems to play more important role as observed by us.

More detailed study and research are thus to be carried on in this State where the people of South and Central Districts are more victimised than those of other Districts by this disease. Moreover, t

**Pregnosticon "All-in" quantitative test Organon Ltd.*

TABLE 4

The monthly income indicates Income of the entire Family Constituting 14 to 20 Members

Nutritional and Haematological Status

(20 Selected Cases)

1978

With their Family Income

Patient	Age	Weight (Kg.)	Height (Cm.)	Total Protein (Gm.%)	Albumin (Gm.%)	Globulin (Gm.%)	Haemoglobin (Gm.%)	R.B.C. (millions/cu mm of blood	P.C.V. (%)	M.C.V. (Cu. Microns)	M.C.H. (Micro-Microglam)	M.C.H.C. (%)	Iron (μgm)	Iron Binding capacity (μgm)	FAMILY INCOME (MONTHLY)
															Rs.
Y.D.	23	51	157.5	7.3	3.3	3.0	12.6	5.5	40	72.7	22.9	31.5	100.0	140.0	350.00
L.D.	27	45	150.0	5.1	2.7	2.4	6.8	3.2	30	93.7	21.2	22.6	63.0	309.0	300.00
A. Begum	24	50	150.0	4.4	2.9	1.5	8.8	3.0	25	83.3	19.3	23.2	36.0	396.0	200.00
G.D.	23	54	157.5	6.1	4.3	1.8	11.0	4.6	42	91.3	23.9	26.1	67.2	336.0	500.00
R.D.	22	54	152.5	5.9	3.7	2.3	9.6	3.2	31	86.8	30.0	30.9	48.0	349.0	570.00
I.D.	23	51	152.5	7.1	3.9	3.2	11.4	4.1	32	102.0	28.5	27.1	84.0	334.0	340.00
Neikim	28	49	140.0	5.2	3.1	2.1	9.6	3.4	31	91.1	25.3	30.9	66.0	328.0	870.00
Thangi	23	50	152.5	5.1	1.2	3.9	7.8	3.1	28	93.8	25.8	27.8	36.0	375.0	306.00
Ading	22	48	147.5	6.0	3.5	2.5	10.2	4.2	40	95.2	24.2	25.5	82.0	285.0	740.00
P.D.	22	32.5	120.0	5.8	3.0	3.8	8.0	3.0	38	126.6	26.6	21.1	69.0	292.0	170.00
Chingkhangai	25	50	152.5	6.0	3.8	2.2	8.0	3.1	25	89.2	28.5	32.0	69.0	292.0	200.00
M.D.	20	42	147.5	6.0	2.3	3.7	10.2	3.0	35	158.5	35.9	22.7	76.0	301.0	80.00
L.D.	30	51	152.5	5.8	3.2	2.6	8.8	4.0	38.0	95.0	22.0	23.2	71.0	312.0	400.00
Ch.D.	23	48	152.5	6.3	3.3	3.0	10.8	3.4	35	104.2	32.1	30.9	87.0	309.0	540.00
A.D.	28	40	150.0	6.0	3.1	2.9	9.2	3.3	39	118.2	27.9	23.6	126.0	156.0	300.00
Margaret	18	46	160.5	4.9	2.7	2.2	5.2	2.2	19	86.4	23.6	27.4	42.0	448.9	200.00
Ngaiphal	20	42	156.3	5.8	3.7	2.1	8.8	3.0	25	83.3	29.3	35.2	42.0	376.6	300.00
N.D.	24	50	155.0	5.1	2.9	2.2	8.0	3.4	30	88.2	23.5	26.7	21.0	376.0	250.00
Thiampai	23	48	147.5	6.2	4.0	2.2	13.8	4.2	30	71.4	32.9	46.0	82.0	297.0	570.00
B.D.	23	54	162.5	7.0	3.0	4.0	13.8	4.4	34	77.3	31.3	40.6	89.0	282.0	1140.00

TABLE V

Type of Food	Intake			Remarks
	Daily	Frequently	Occasionally	
Rice	All Cases	—	—	Twice Daily
Chapati	—	—	—	All Once/Twice Per Year
Potato	—	All Cases	—	Once Daily
Vegetable	All	All	—	Once/Twice Daily
Pulses	—	All	—	Twice/Thrice Weekly
Fresh Fish	All	17	3	Once/Thrice Weekly
Dried Fish	All	—	—	Once/Twice Daily
Fermented Fish	18	2	—	Daily Once at Least
Milk	—	8	12	Twice/Thrice Weekly
Meat	—	8	12	Twice/Thrice Weekly
Fermented Soyabean	—	7	13	Twice/Thrice Monthly
Fermented Bamboo Shoot	—	10	10	Twice/Thrice Monthly

malignant sequence of chorio-carcinoma is very rare and subsequent pregnancy seems to be irrelevant following this disease.

Summary

116 cases of molar pregnancy studied during 1971-74 and nutritional, socio-economic as well as haematological status of 20 cases investigated. The possible co-relation between age group, socio-economic and nutritional status, topographic as well as ethnic stocks—being more susceptible to this condition still require more detail and elaborate study and research. This preliminary study in the local population of Manipur State encourages all the workers for more elaborate research in this field.

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