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Editorial

Treatment of Molar Pregnancy

Gestational Trophoblastic Disease comprises a spectrum of pregnancy related tumours ranging from premalignant conditions of Complete Hydatidiform Mole (CHM) and Partial Hydatifarm Mole (PHM) through to the malignant invasive mole, choriocarcinoma and very rare Placental Site Trophoblastic Tumour (PSTT) or Epithelioid Trophoblastic Tumour (ETT) which have varying propensities for local invasion and metastasis. Al these tumours are the results of aberrant or faulty fertilization of the ovum and arise from fetal chorion comprising of both syncytiotrophoblast and cytotrophoblast except placental site trophoblastic tumour, which arises from intermediate type of trophoblastic cells. Malignant forms of the disease are collectively known as Gestational Trophoblastic Neoplasia (GTN) or tumour. Seventy years ago, most women diagnosed with GTN were expected to die but following the development of effective treatment by chemotherapy and immunotherapy all patients expect to be cured.

Hydatidiform mole – Treatment of this condition should be immediately after diagnosis. Treatment depends on the presentation. Now a days most commonly patients present with history of ammenorrhoea and report of ultrasonography either transvaginal or transabdominal which shows mass in the enlarge uterine cavity, filled up by cystic spaces by mass giving rise to snow storm appearance. Treatment of this type of presentation consists of correction of anaemia and other medical disorders like hypertension, hypothyroidism and preeclampsia followed by suction / evacuation by electric suction machine under general anasthesia. When size of the uterus is less than 8-week pregnancy size, manual M.R syringe can be used. In no other situation manual suction machine should be used. Disadvantage of use of manual suction machine is profuse per-operative bleeding, incomplete evacuation and perforation of the uterus.

After suction evacuation all the walls of the uterus should be curetted by large curette and the materials sent for histopathological examination for the exclusion of invasiveness or choriocarcinoma.

Immediately after evacuation products needs to be examined by keeping in a net and seen under running tap water for the presence of the vasicle, size of the vasicle and completeness of molar pregnancy. Then the product is sent for histopathological examination for diagnosis of mole, presence of amy invasiveness or choriocarcinoma.

Suction curettage, performed under ultrasound guidance is the preferred method of evacuation of HM independent of uterine size if maintenance of fertility is desired. Hysterectomy is an alternative to suction curettage if childbearing is complete. In addition to removing the molar tissue, hysterectomy provides permanent sterilization and decreases the need for subsequent chemotherapy by eliminating the risk of local myometrial invasion as a cause of persistent disease. Blood loss during evacuation is usually moderate, but precautions should be taken for massive transfusion. Oxytocin infusions may help to stop bleeding but prolonged infusions with multiple uterine contractions can lead to trophoblast embolization to the lungs. Severe bleeding can also be controlled by uterine packing or through vascular embolization using interventional radiology. Patients who are Rh negative should receive Rh immunoglobulin to prevent Rh alloimmunization in their future pregnancies.

Once the suction evacuation procedure is completed safely, she is advised for 48 hours post evacuation serum βhCG level and one week post evacuation trans-vaginal or transabdominal ultrasonography to be sure that uterus is empty and there is no molar tissue or product of conception in the uterine cavity.

It the uterine cavity is not empty, then it should be emptied by check D&C because the retained molar tissue is usually alive and it grows rapidly, uterus enlarged, irregular per vaginal bleeding occurs and serum βhCG level rises rapidly. It gives false impression of development of invasive mole or choriocarcinoma and injudicious use of chemotherapy which results in rise in WHO scoring during further chemotherapy, if required.

So, as soon as incomplete evacuation of the uterus is diagnosed it should be made empty by D&C otherwise

follow-up results will be false. When uterus is empty by suction evacuation or check D&C follow-up of the patient is started by weekly or two weekly serum βhCG level up to 6-8 weeks or up to two negative serum βhCG level. Then it should be measured monthly for 6 months. During each follow-up sign symptoms of development of invasive mole or choriocarcinoma should be enquired for. During follow-up 10-15% of complete mole and .5-1% of partial mole give rise to GTN.

Role of prophylactic chemotherapy – It is a controversial issue. The administration of prophylactic chemotherapy cannot currently be recommended as it may increase drug resistance, delay in treatment of GTN and expose women unnecessarily to toxic side effects of chemotherapy. However, some studies show incidence of post-molar gestational trophoblastic disease is less with prophylactic chemotherapy. One course of prophylactic chemotherapy may be useful in high-risk complete molar pregnancy, which reduces post molar persistent disease from 20% to 10%.

Chemoprophylaxis with a one-time dose of single-agent chemotherapy can be considered. It is most effective if given one to two hours before suction evacuation or within two weeks of suction evacuation procedure. This chemoprophylaxis reduces the trophoblastic tissue spread in the general circulation by killing the cells which have been spread by the suction evacuation procedure. Some patients with molar pregnancy are considered high risk for developing persistent or metastatic disease.

In these patients, data have shown the rates of persistent disease have decreased from about 50% to 15% by prophylactic chemotherapy. Chemo-prophylaxis in lower-risk patients can also be considered if they seem as potentially noncompliant.

Despite the impressive progress discussed in the preceding sections, much still needs to be done. For example, currently we cannot accurately predict which HM will subsequently need chemotherapy as opposed to simply spontaneously remitting after uterine evacuation. If a test could be developed that at the point of uterine evacuation identified patients needing additional treatment, then those individuals could start such therapy immediately. Conversely, women not needing therapy could be reassured and either avoid hCG monitoring or at the very least complete this much earlier

It remains an exciting time for new investigators to engage and for those countries without GTD services to actively seek to develop them. Indeed, to achieve the best patient results globally, we need more dedicated GTD healthcare teams assembled so this should be a future direction in any country lacking such expertise. In Europe the European Organization for the Treatment of Trophoblastic Diseases is championing the establishment of more centralized care for GTD.

GTD is rare disease, so centralized care is necessary to ensure adequate skill levels in the team members, otherwise high cure rates cannot be achieved.

Indeed, data from a recent survey for GTD survival in countries that do not have centralized care including the USA show considerably lower survival rates. Similar improved survival results have been shown to be significantly higher when the disease is managed in specialized centres than in district general hospitals.

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