Editorial

Treatment of Molar Pregnancy: Present day perspective

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Gestational Trophoblastic Disease comprises a spectrum of pregnancy related tumours arising from placenta ranging from premalignant conditions of Complete Hydatidiform Mole (CHM) and Partial Hydatidiform Mole (PHM) through to the malignant invasive mole, choriocarcinoma and very rare Placental Site Trophoblastic tumors (PSTT) or Epithelioid Trophoblastastic Tumors (ETT) which have varying propensities for local invasion and metastasis. These tumors 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.

Hydatidiform mole – Treatment of this condition should be started immediately after diagnosis. Treatment depends on the presentation. Now a days most commonly patients present with history of amenorrhoea and ultrasonography reports 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 anemia and other medical disorders like hypertension, hypothyroidism and preeclampsia followed by suction evacuation under general anaesthesia. Blood should be cross-matched and kept available if necessary. Usually the cervical dilatation is not required as the cervix is very soft and easily permit the use of soft cannula. The tip of the suction canula is inserted just beyond the internal os. If the uterus is larger than 14 weeks of gestation one hand should be placed on top of the fundus and uterus should be massaged to stimulate uterine contraction and reduce the risk of perforation. After the uterus is evacuated, a gentle sharp curettage of the uterus should be carried out and the material sent for histopathological examination for the exclusion of invasiveness or choriocarcinoma .Rh negative women should receive Rh immune globulin as trophoblast cells express the RhD factor.

Oxytocin infusions may help to stop bleeding but prolonged infusions with multiple uterine contractions can lead to trophoblastic embolization to the lungs. Severe bleeding can also be controlled by uterine packing or through vascular embolization using interventional radiology. 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 may be performed with the mole in situ for women in perimenopausal age or who request surgical sterilization. Despite hysterectomy careful follow-up is required since choriocarcinoma can still develop.

Once the suction evacuation procedure is completed safely, she is advised for 48 hours post evacuation serum βhCG level and assayed every week till three consecutive levels are found to be normal. Thereafter done at monthly intervals until they are normal for six consecutive months. During each follow-up signs 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 unnecessary 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%.

High level of HCG more than 4 weeks postevacuation, progressively increasing level of HCG at any time post evacuation, any detectable level of HCG not showing a tendency to disappear 4-6 months postpartum, evidence of metastasis with any level of HCG are the criteria of postevacuation chemotherapy.

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. Chemoprophylaxis 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. In order 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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