Prevention of Gestational Trophoblastic Neoplasia



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Introduction

Gestational trophoblastic diseases are a group of proliferative disorders that originate from trophoblast. It includes the benign forms that are complete mole and partial mole [1]. The malignant forms are termed gestational trophoblastic neoplasia (GTN) which includes the invasive mole, choriocarcinoma, epithelioid trophoblastic tumor (ETT), and placental site trophoblastic tumor (PSTT). It may follow molar pregnancy or non-molar gestation. These malignancies can occur weeks or even years following any pregnancy but occur most commonly after a molar pregnancy [2]. In many cases, diagnosis and management may be a challenge. Hemida et al., reported a case who received non-specific treatment for uterine bleeding for 2 years then underwent hysterectomy and proved to have invasive mole [3].

Objectives

To review the published literature for strategies in prevention or decreasing incidence of gestational trophoblastic neoplasia (GTN).

Methods

Collected data through literature review in "PubMed" with search titles: "Prevention AND GTN ", and "Early detection AND GTN" during the period from the year 2000 till 2026.

Results

Increase awareness of women about GTD may be facilitated using the social media and on-site campaigns. The reach of physicians through national and international meetings is essential.

In an Irish GTD registry survey, an anonymized questionnaire was distributed to all women on the GTD registry. A quarter of respondents reported that other medical professionals with whom they interacted during follow-up treatment did not understand their condition. The study revealed a knowledge gap in molar pregnancy amongst healthcare professionals which should be considered in future planning of medical and nursing curricula [4]. International societies such as International Society of Study of Trophoblastic Diseases (ISSTD). Use of prophylactic chemotherapy during evacuation of high-risk mole was recommended. Upfront hysterectomy for high-risk complete mole at old age was also reported. Post-molar surveillance together with effective contraception for early detection of GTN progression.

Conclusion

Preventive strategies to reduce incidence of gestational trophoblastic neoplasia are existing in literature. Increasing awareness of GTD among ladies and physicians will help in early diagnosis. Proper post-molar follow up, prophylactic chemotherapy for high-risk moles, and upfront hysterectomy for older ladies who had completed their families; are reported strategies

References

1.Ngan HYS, Seckl MJ, Berkowitz RS, Xiang Y, Golfier F, Sekharan PK, Lurain JR, Massuger L. Diagnosis and management of gestational trophoblastic disease: 2021 update. Int J Gynaecol Obstet. 2021 Oct;155 Suppl 1(Suppl 1):86-93. doi: 10.1002/ijgo.13877.

2.Lurain JR. Gestational trophoblastic disease I: epidemiology, pathology, clinical presentation and diagnosis of gestational trophoblastic disease, and management of hydatidiform mole. Am J Obstet Gynecol. 2010 Dec;203(6):531-9.

3.Hemida R, Doorn HC. Avoid making a mountain out of an invasive hydatidiform mole: do a pregnancy test! The Lancet 2019; 394 (10194), e2.

4. Joyce CM, Coulter J, Kenneally C, McCarthy TV, O'Donoghue K. Experience of women on the Irish National Gestational Trophoblastic Disease Registry. Eur J Obstet Gynecol Reprod Biol. 2022 May;272:206-212. doi: 10.1016/j.ejogrb.2022.03.039. Epub 2022 Mar 28. PMID: 35367922.