Abstract:
Vesicular Mole is a benign neoplasm of the trophoblast with malignant potential. It is diagnosed by clinical findings, hCG titre and ultrasound. Urine Pregnancy Test - UPT (sandwich technique) may be negative with excessive levels of hCG. As false negative urine pregnancy test is common with very high levels of beta-hCG, good clinical examination and quantitative beta hCG should be relied upon to diagnose molar pregnancy.

Keyword: UPT NEGATIVE MOLAR PREGNANCY

CASE SUMMARY:
A 23 years old female, G2P1L1, 3 months amenorrhoea, Referred as vesicular mole with No H/o abdominal pain / bleeding PV / discharge PV / Vomiting. No evidence suggestive of hyper-thyroidism / PIH.

MENSTRUAL HISTORY:
Her cycles are regular , Once in 30 days, lasting for 4 days
LMP – 31.5.2011

MARITAL HISTORY:
 Married since 4 years
Non consanguinous marriage

OBSTETRIC HISTORY:
G2P1L1
I – FTND , Girl, 3 years, Alive and Healthy
II – Present Pregnancy
Pregnancy diagnosed by urine pregnancy test at 55 days of amenorrhoea.
Ultra sound taken on 31.8.2011 diagnosed as complete vesicular mole, ovaries – Bilateral theca lutein cysts of 2 x 1 cm

PHYSICAL EXAMINATION:
Thin built, Not anaemic, No pedal oedema
Vital stable, Thyroid, Breast, Spine – Normal
Abdomen – uterus enlarged to 22 weeks size, Doughy consistency, Fetal pole could not be made out
External genitalia – normal
Vagina – Normal. No suburethral Nodules

INVESTIGATIONS
Urine, CBC, RFT, LFT – Normal
CXR – PA view – Normal study
Blood group – O+ve
Urine Pregnancy Test (Sandwich Technique) – Negative
Serum beta hCG - >5 lakh mIU/ml
Ultrasound – Vesicular Mole

DIAGNOSIS
Vesicular Mole
Prognostic score : 8

MANAGEMENT
Suction evacuation of vesicular mole done on 1.9.2011 under I.V. Anaesthesia.
Typical grape like vesicles were evacuated and sent for HPE. Intra operative and post operative period uneventful. No blood transfusion was needed.

FOLLOW – UP
Serum beta hCG – 10 days after evacuation (11.9.2011) – 22,041 mIU/ml
Six weeks after evacuation (11.10.2011) – 2,989 mIU/ ml
Patient started on single dose chemotherapy (Methotrexate)
After 9 doses of chemotherapy, Beta – hCG (12.12.2011) 146.90 mIU/ ml
Patient started on combination chemotherapy - Etoposide, Methotrexate, Actinomycin, Cyclophosphamide, Vincristine (EMA – CO).

HOME PREGNANCY TEST
Sandwich immuno assays in which two antibodies directed against alpha & beta subunits of hCG molecule sandwich a single antigen to produce color change. Urine sample placed on the membrane reacts with migratory colloidal gold particles coated with anti beta hCG antibodies.

These antibody bound particles then migrate by capillary action to fixed detective line coated with either alpha hCG or goat anti mouse antibody (control). To induce color change, a single hCG molecule must be bound by the antibodies to both subunits, forming a sandwich that attaches the gold particles for color change.

HIGH DOSE HOOK EFFECT
Excessive levels of free antigen in the sample allow the anti alpha hCG & anti beta hCG antibodies to bind each subunits of different hCG molecules rather than subunits of same molecule, preventing them from forming a sandwich. As a result, the gold particle necessary for color change is never bound, leading to false negative UPT test.
As false Negative Urine Pregnancy test is common with very high levels of beta-hCG, a good clinical examination & quantitative beta hCG should be relied upon for a diagnosis of vesicular mole.

REFERENCES:
Textbook of Microbiology – Anantha Narayanan and Panicker.