ECTOPIC PREGNANCY

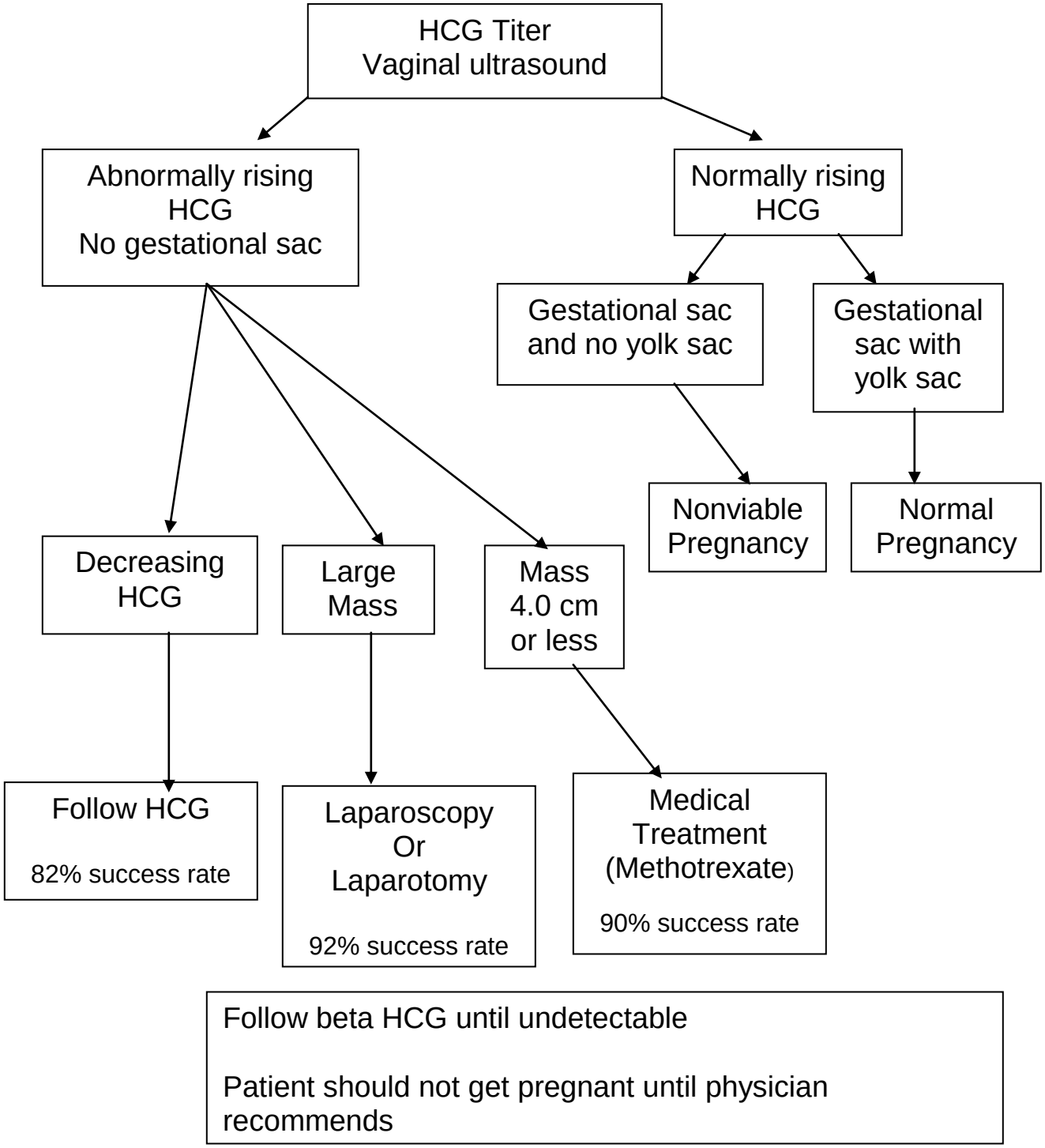
DEFINITION:
- Implantation of the fertilized ovum anywhere other than the endometrial lining of the uterus. 97% involve the fallopian tube, 3% in abdominal cavity, ovary or cervix

INCIDENCE:
- Leading cause of death in first trimester
- 1.9% of reported pregnancies

RISK FACTORS:
- Previous ectopic pregnancy
- Previous tubal surgery
- History genital infections (STI, PID, etc.)
- Current smoking
- Previous IUD
- 50% had no risk factors

DIAGNOSIS (requires combination of tests and physical exam):
- High index of suspicion
- Only about 15% have classical signs: vaginal bleeding and abdominal/pelvic pain approximately 7 weeks after amenorrhea
- Tests: ultrasound, serum beta HCG, serum progesterone, occasional curettage
- Suspect if transabdominal ultrasound shows no gestational sac with beta HCG $\geq$ 6500mIU/ml(or IU per liter) or transvaginal US with betaHCG $\geq$ 1500
- Beta HCG not rising at least 53% every 2 days
- Asymptomatic -> symptomatic-> rupture (higher rupture rate in pts who had tubal ligation)
- Clinical signs and symptoms: (ectopic pregnancy cannot be diagnosed or excluded on basis of physical exam findings only)
  - Early pregnancy symptoms
  - Cervical motion tenderness
  - Adenexal tenderness
  - Adnexal mass
  - May have enlarged uterus
  - Bulging culdesac
  - Pain localized early, generalized later
  - Referred shoulder pain
  - Bathroom sign: attempt to defecate & faint
  - Cullen's sign: ecchymosis of periumbilical area
  - Turner' sign: ecchymosis over the flanks
  - Tender abdomen (guarding and rebound tenderness may be present if ruptured)
  - Hypotension

MANAGEMENT OPTIONS (**CONSUT HCMC OB/GYN ASAP**):



METHOTREXATE MTX PROTOCOL :

Indications:
- Healthy, hemodynamically stable, reliable, compliant patient
- Ectopic ≤ 3.5 cm on ultrasound
- Beta HCG ≤ 10,000 IU/ml

Procedures:
- **Consult HCMC OB/GYN**

- Day 0: obtain beta HCG, CBC, LFT's, blood type, serum creatinine and BUN, and antibody screen (Rhogam if Rh negative and > 8 wks gestational age)
- Day 0: give MTX 50 mg/m2 IM x1 dose
- Days 1,4,7: repeat beta HCG
- Day 7: repeat CBC & LFT's, Cr/BUN

  Follow beta HCG weekly until <3 mIu / ml -if patient does not have 15% decrease in beta HCG between day 4 & 7, give second dose MTX 50 mg /m2

Additional considerations:
- Cardiac activity on ultrasound is a strong relative contraindication to MTX
- Patients may have more pain after MTX, not less. Pain medications should be given routinely.
- Most women have a rise in beta HCG from Day 1 to 4 after MTX.
- Abnormal lab values should not exclude women from MTX, they are meant to establish baselines for following response to treatment.
- No need to repeat ultrasound or pelvic exams during treatment if patient is stable.
- No intercourse during treatment.
- Can begin to use oral or injectable contraception Day 21, use backup for first cycle or first 30 days.
- Recheck beta HCG after second menstrual period.

FUTURE FERTILITY AND RISK OF RECURRENCE:
Regardless of treatment option, overall conception rate is 70%
Recurrence rate 5-20% with 1 ectopic pregnancy
Recurrence rate 32% in women with 2 consecutive ectopic pregnancies

REFERENCES:
ACOG Practice Bulletin Dec.1998, number 3
American Family Physician, Volume 72, Number 9, November 1, 2005