

INTRAUTERINE GROWTH RESTRICTION (IUGR)

DR SAVVAS ARGYRIDIS

CONSULTANT OBSTETRICIAN GYNAECOLOGIST

Definition

- estimated fetal weight (EFW) $<10^{\text{th}}$ or $<5^{\text{th}}$ centile or <2500 gr by 40weeks
- fetus that does not reach its' growth potential
- drop in sonographic growth centiles
- no consensus regarding universal definition

Predisposing factors

- short stature
- smoking, cocaine
- anemia
- congenital uterine abnormalities
- preeclampsia
- diabetes
- collagen vascular disease
- SLE, antiphospholipid syndrome
- thrombophilia

Predisposing factors

- chromosomal abnormalities, congenital abnormalities
- congenital infection
- multiple gestation
- confined placental mosaicism

Complications

- fetal hypoxia
- cerebral palsy
- fetal death (intrauterine death)
- neonatal death

Diagnosis

Fetal growth ultrasound

-BPD, HC, AC, FL, EFW: <10th, <5th centile

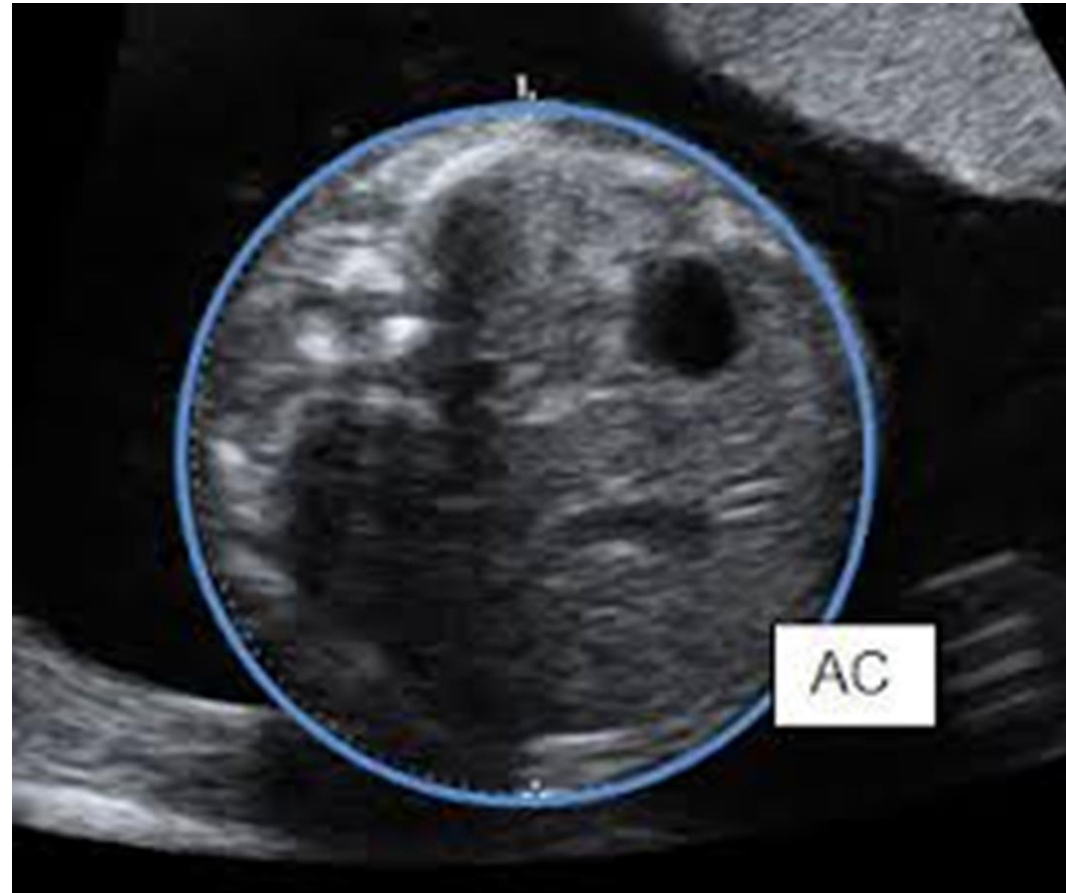
-oligohydramnios

-doppler studies: umbilical artery PI increased, absent, reverse

middle cerebral artery PI decreased (brain sparing effect)

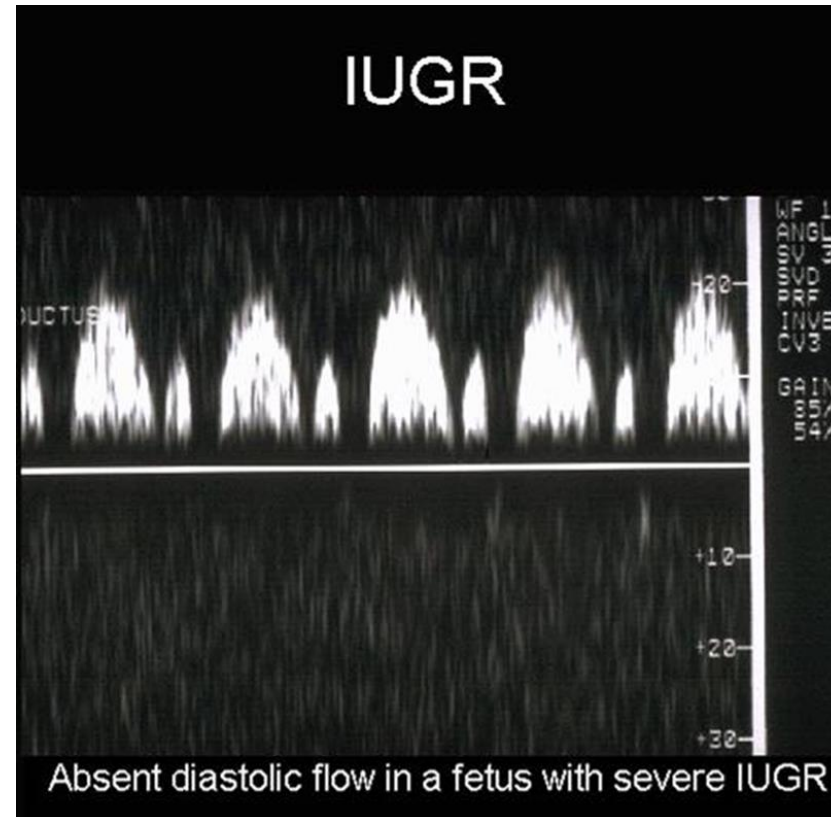
Diagnosis

Abdominal circumference



Diagnosis

Umbilical artery PI doppler



Diagnosis

Amniocentesis

-karyotype

Infection antibodies (TORCH)

Cardiotocogram

-reduced variability, decelerations (late)

Differential diagnosis

earlier gestational age of pregnancy:

-wrong LMP, no 1st trimester dating scan

small for gestational age fetus (SGA):

-at 10th centile, constitutionally small

Management

Delivery

Indications

- gestational age 37 weeks
- cardiotocography abnormal
- doppler ultrasound: brain sparing effect

Prediction

Doppler Uterine artery PI

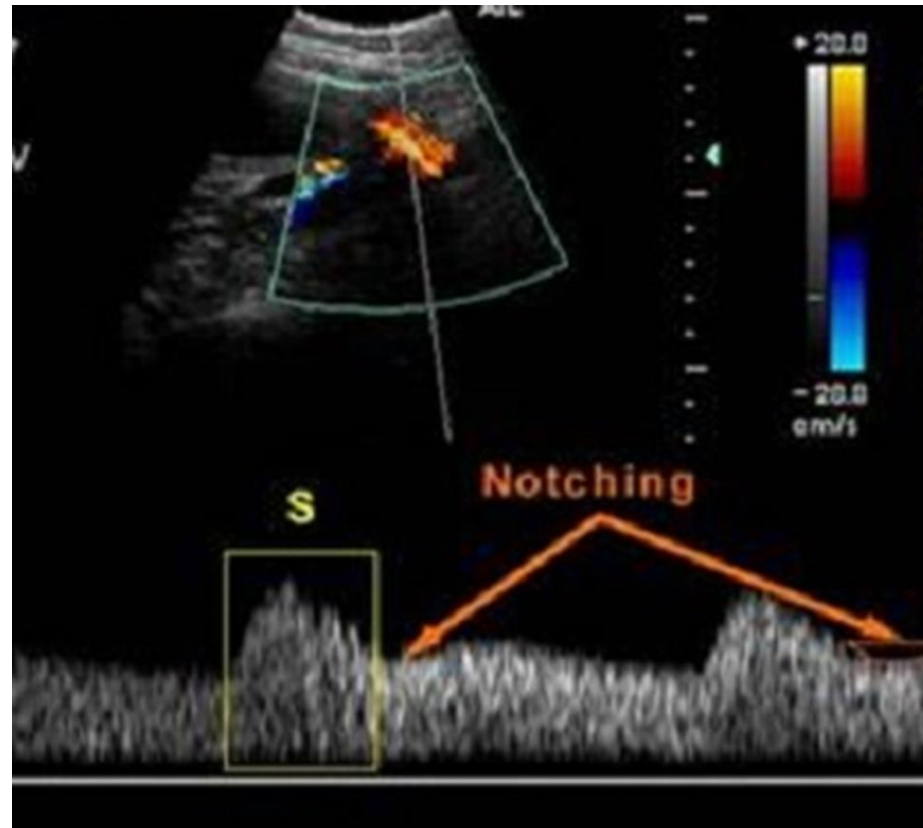
BMI

Previous history of IUGR

Serum PAPP-A

Prevention

Uterine artery PI



Prevention

Aspirin

Dose

-75-150mg daily from <16 to 35 weeks



UNIVERSITY
of NICOSIA



MEDICAL SCHOOL