



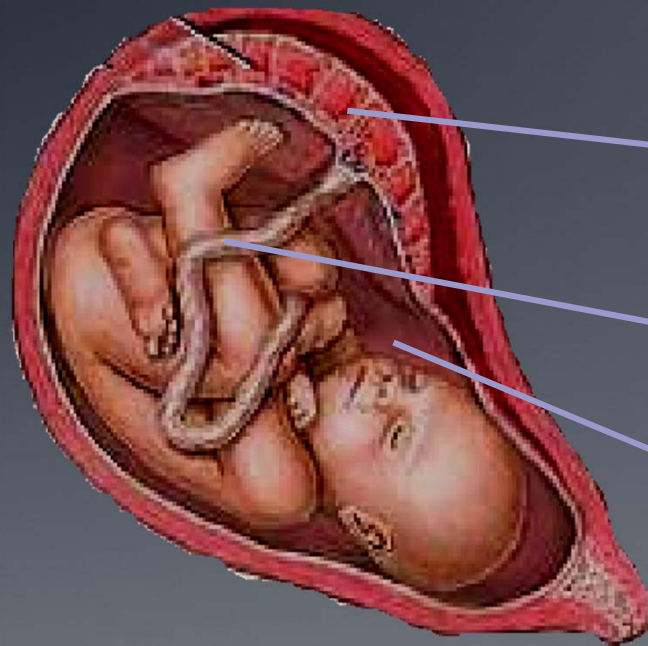
*DIPARTIMENTO DI SCIENZE GINECOLOGICHE E DELLA RIPRODUZIONE UMANA
UNIVERSITA' DEGLI STUDI DI PADOVA*

- ECOGRAFIA DEL III TRIMESTRE -

PATOLOGIA DEGLI ANNESSI FETALI

Gianna Bogana

ANNESSI FETALI



1 - PLACENTA

2 - CORDONE OMBELICALE

3 - LIQUIDO AMNIOTICO

ANNESSI FETALI: PLACENTA

Valutazione placentare nel III trimestre prevede:

1- sede impianto placentare: parete uterina – distanza OUI (TV)

2- controllo base di impianto placentare

3- “aspetto” placentare: ecogenicità eterogenea

presenza di calcificazioni, lacune

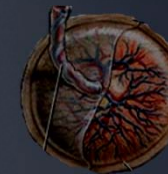
spessore placentare

4- controllo sede di inserzione cordone ombelicale

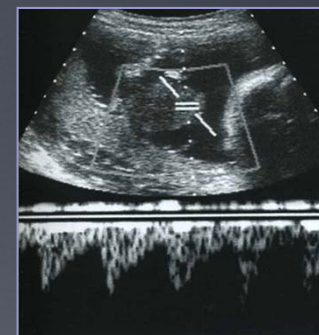
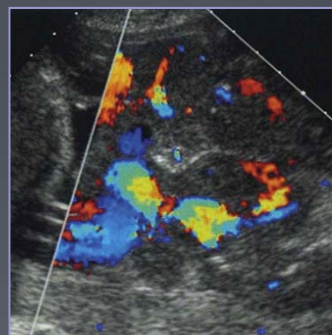
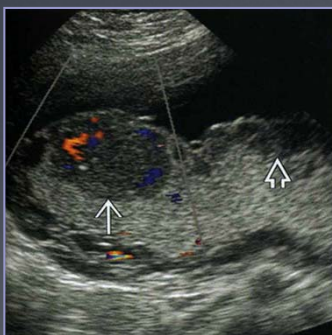
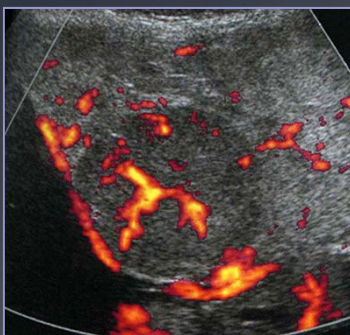
5- cercare lobi placentari accessori (succenturiata)



ANNESSI FETALI: PLACENTA



1- CORIONANGIOMA



- Tumore placentare benigno più frequente
- Sede più frequente: lato placentare vicino all'inserzione del cordone
- Generalmente ipoecogeno, ben definito, ben vascolarizzato
- Se > 5 cm può dare complicanze: polidramnios, insufficienza placentare, idrope (da shunt A-V o anemia fetale da emolisi)

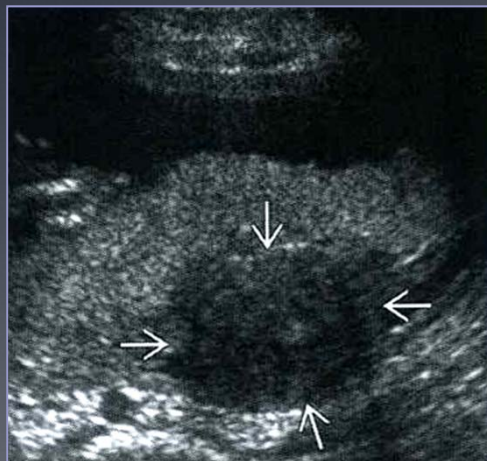
- ❖ *Generalmente non necessario trattamento*
- ❖ *No idrope: prognosi eccellente*
- ❖ *Idrope: considerare intervento*
- ❖ *Polidramnios: amnioriduzione*

ANNESSI FETALI: PLACENTA



1- CORIONANGIOMA

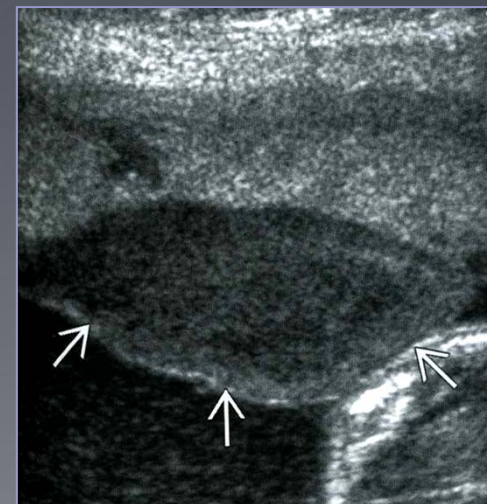
DIAGNOSI DIFFERENZIALE



FIBROMA

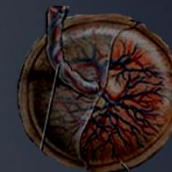


EMATOMA RETROP.



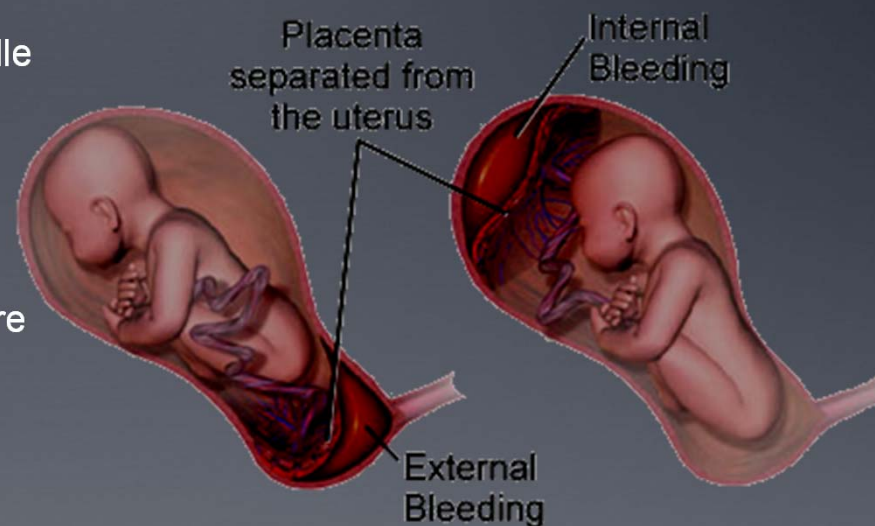
LACUNA VASCOLARE

ANNESSI FETALI: PLACENTA



2- DISTACCO PLACENTARE

- Distacco della placenta prematuro dall'utero: 1% delle gravidanze
- Area ipoecogena (sangue \pm coagulato)
- Marginale (+ comune), retroplacentare, preplacentare
- 50% distacchi placentari NON VISIBILI in ecografia
- Stimare la superficie placentare staccata
- Controllare frequenza cardiaca e benessere fetali

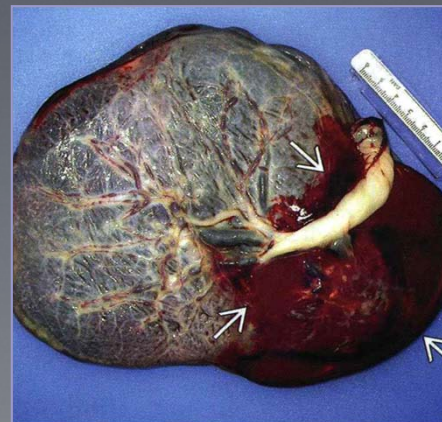
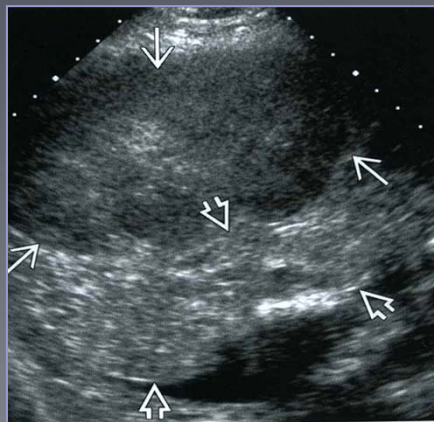
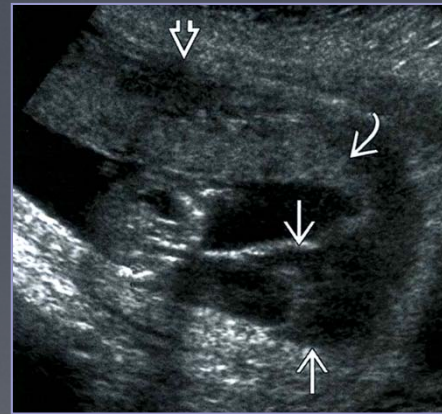
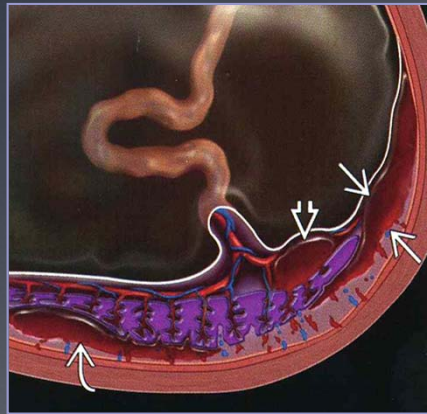


POWER DOPPLER utile per diagnosi: flusso assente!!!

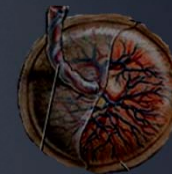
ANNESSI FETALI: PLACENTA



2- DISTACCO PLACENTARE



ANNESSI FETALI: PLACENTA

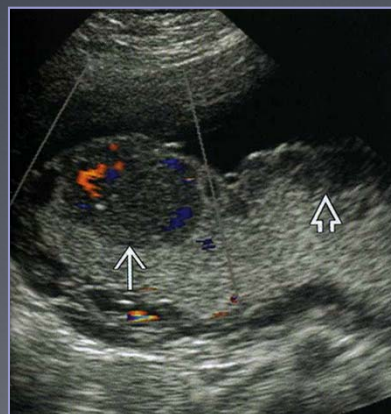


2- DISTACCO PLACENTARE

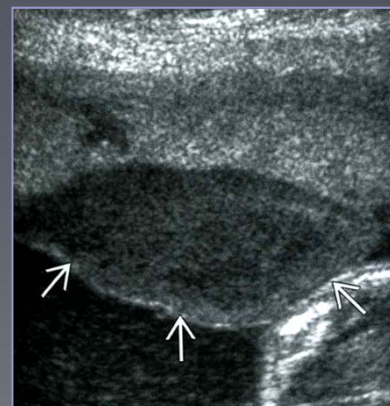
DIAGNOSI DIFFERENZIALE



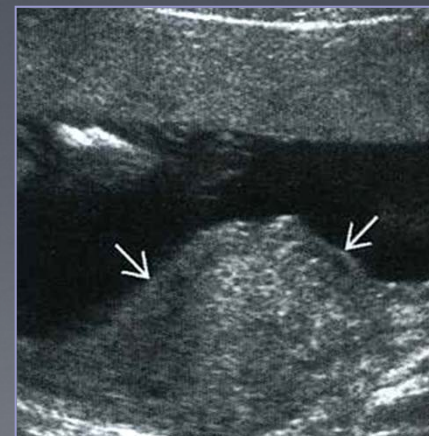
FIBROMA



CORIONANGIOMA

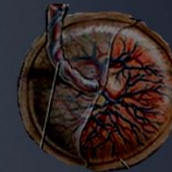


LACUNA VASCOLARE

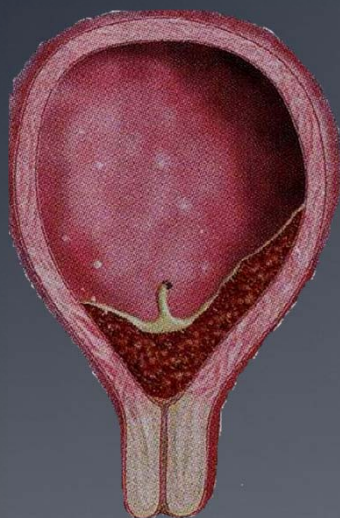


CONTRAZIONE

ANNESSI FETALI: PLACENTA



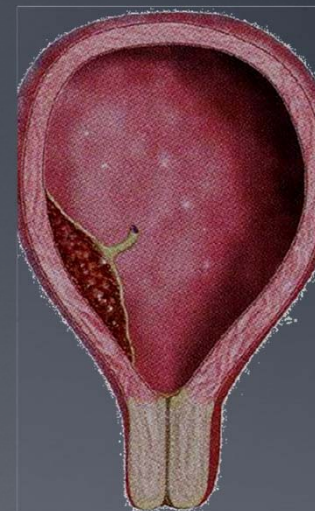
3- PLACENTA PREVIA



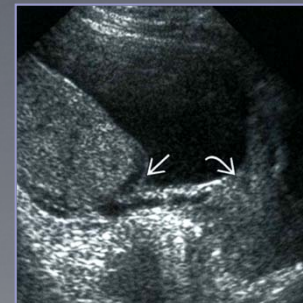
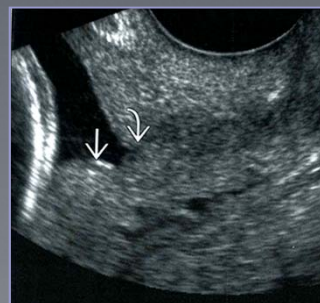
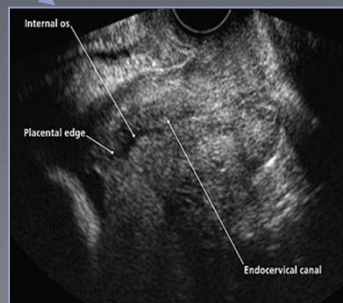
CENTRALE



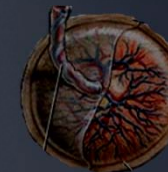
MARGINALE



“BASSA”



ANNESSI FETALI: PLACENTA

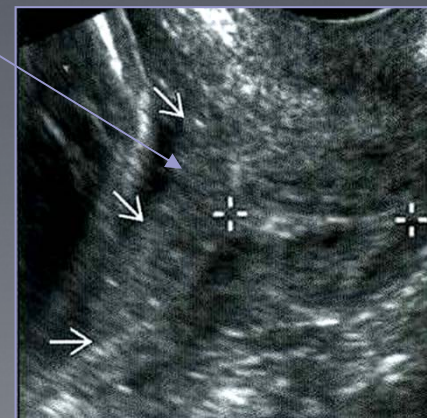
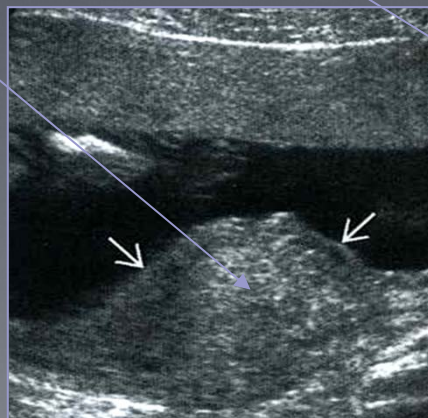


3- PLACENTA PREVIA

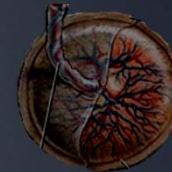
- Base di impianto placentare sopra o vicino all'OUI
- Diagnosi certa: eco TV!!

- **Centrale:** copre completamente l'OUI
- **Marginale:** bordo < 25 mm dall'OUI
- **Parziale:** copre parzialmente l'OUI
- **"Bassa":** > 25 mm dall'OUI

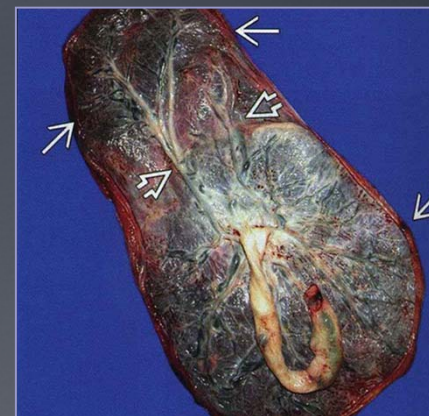
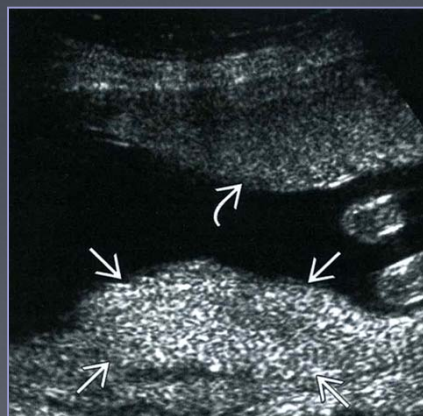
- 5% sono associate a placenta accreta
- DD con contrazioni miometriali focali e distacco di placenta



ANNESSI FETALI: PLACENTA



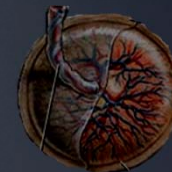
4- LOBO SUCCENTURIATO



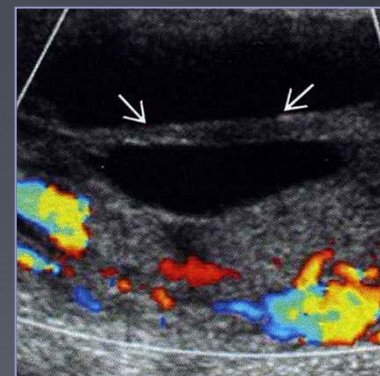
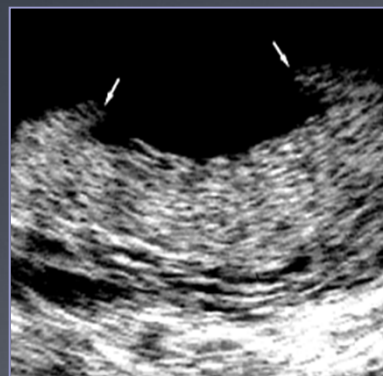
- Uno o più lobi placentari accessori (dimensioni minori della placenta)
- Inserzione del cordone: nel lobo placentare principale
- Due masse placentari separate ma connesse da vasi sanguigni
- Principale causa di VASA PREVIA!!
- Possono raggiungere l'OUI fino a ricoprirlo (eco TV)
- Controllare tutto l'utero prima di definire posizione placentare!!
- DD: contrazioni uterine



ANNESSI FETALI: PLACENTA

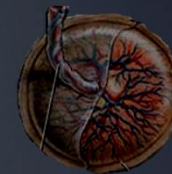


5- PLACENTA CIRCUMVALLATA



- Margini placentari sollevati completamente o parzialmente (“a mensola”)
- Rima iperecogena periferica
- Solo parziale: asintomatica
se $> 2/3$ della placenta: sintomatica (Abruptio placentae, PPRM, IUGR, PPT)
- Diagnosi ecografica difficile

ANNESSI FETALI: PLACENTA



5- PLACENTA CIRCUMVALLATA

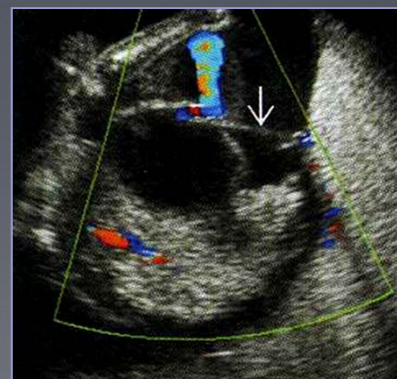
DIAGNOSI DIFFERENZIALE



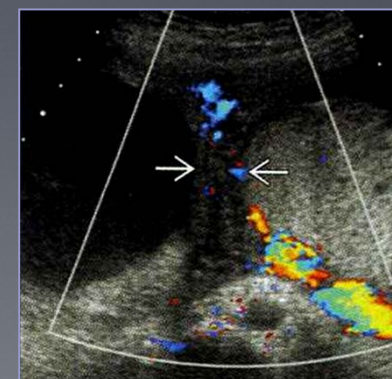
SINECHIA



SINECHIA

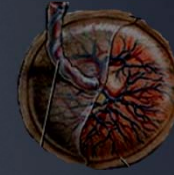


BANDA
AMNIOTICA



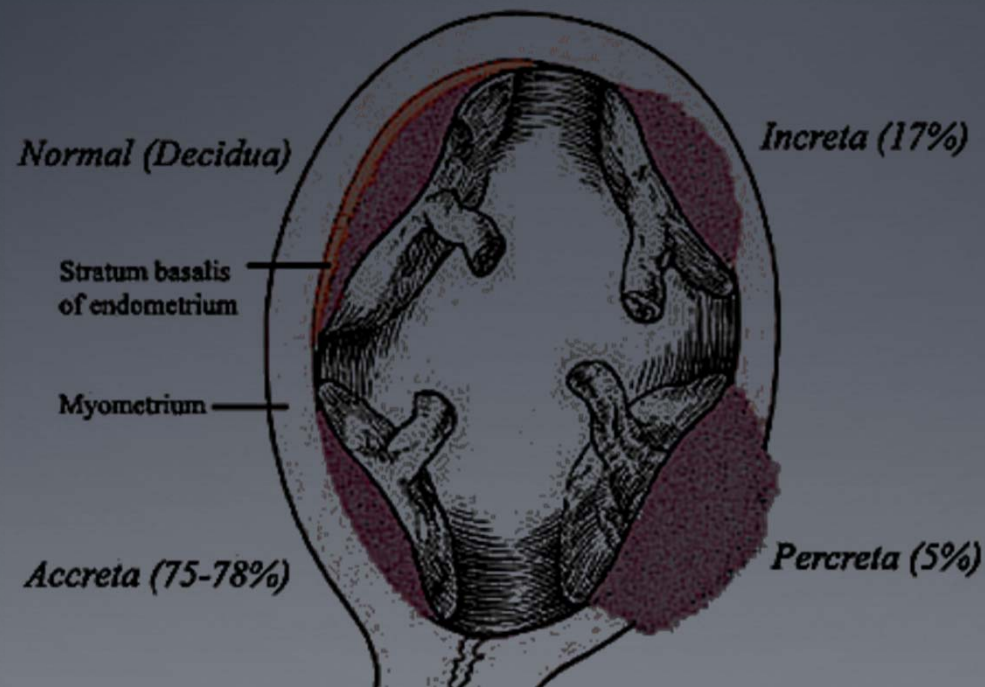
SETTO
UTERINO

LESSI FETALI: PLACENTA

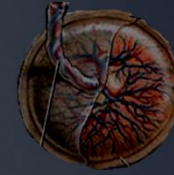


PLACENTA ACCRETA

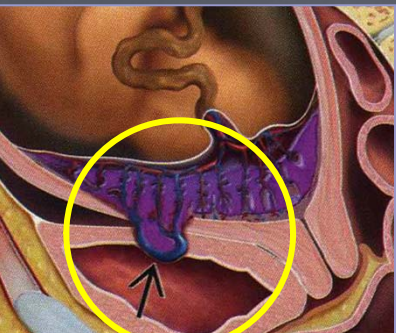
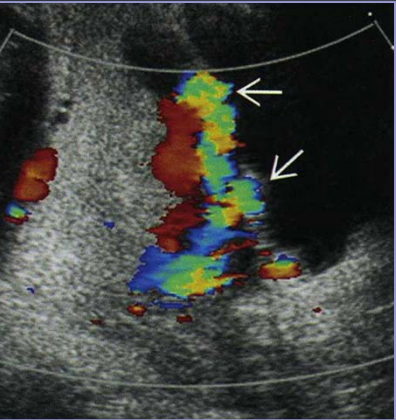
anomala penetrazione placentare oltre lo spessore endometriale



LESSI FETALI: PLACENTA

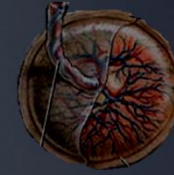


PLACENTA ACCRETA



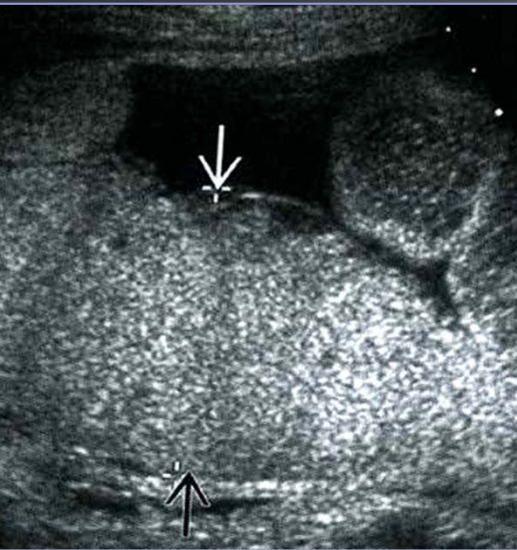
- Assenza della zona ipoecogena sottoplacentare
- Lacune vascolari irregolari
- Spesso con placenta previa
- Grossi vasi si estendono attraverso il miometrio fino alla vescica
- RMN e ECO hanno poco valore predittivo (> se percreta)
- Accreta → percreta
- In 10% pz con >4 TC e non previa
- In 67% pz con previa e > 4 TC

LESSI FETALI: PLACENTA



PLACENTOMEGALIA

SPESSORE PLACENTARE > 4 cm



SPESSORE ↑ IN GRAVIDANZA:

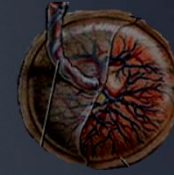
- 10mm a 10 sg
- 20mm a 20 sg
- 30mm a 30 sg

Diagnosi "aspecifica"

Morfologia normale ma spessore >

Escludere miometrio nella misurazione!

DIAGNOSI FETALI: PLACENTA



PLACENTOMEGALIA

DIAGNOSI DIFFERENZIALE



ABRUPTIO



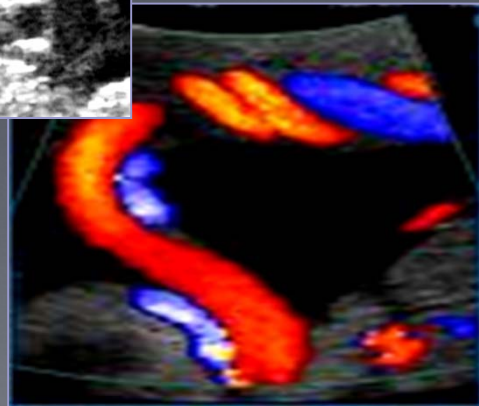
ABRUPTIO



MIOMA



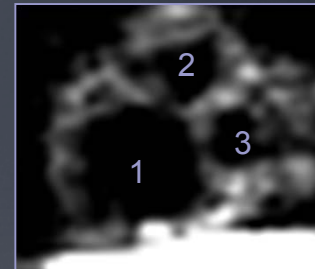
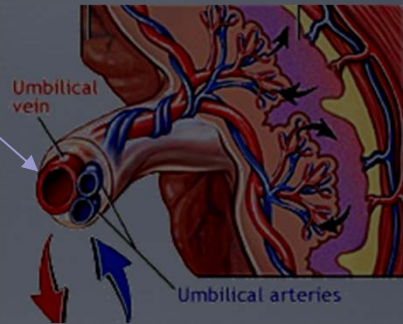
ANOMALIE FETALI: CORDONE OMBELICALE



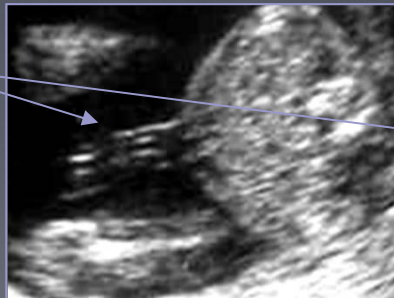
LESSI FETALI: CORDONE OMBELICALE



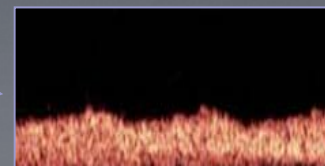
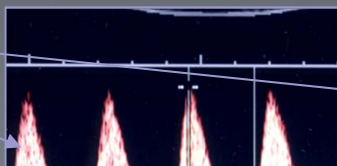
Normale: 3 vasi circondati da gelatina di Wharton
Arterie ombelicali (dal feto alla placenta)
Vena ombelicale (dalla placenta al feto)



Linea funicolare placentare
Linea funicolare parete addominale fetale



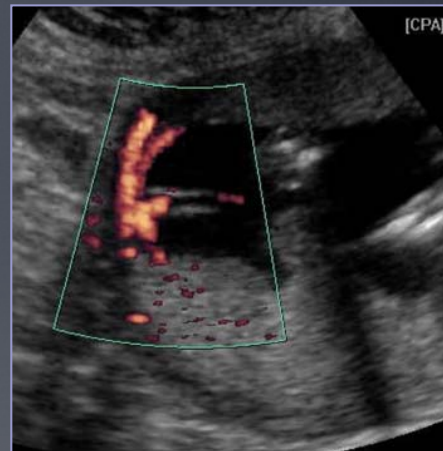
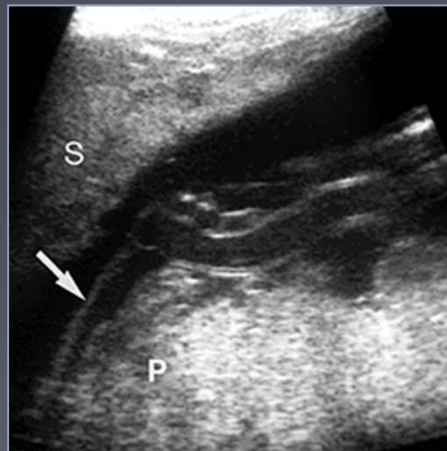
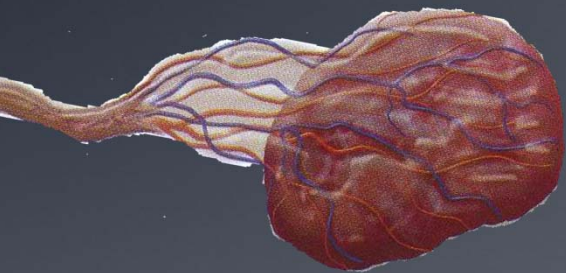
Arteria ombelicale: bassa resistenza
Vena ombelicale: flusso continuo



LESSI FETALI: CORDONE OMBELICALE



SERZIONE VELAMENTOSA



ione funicolare sottomembranosa

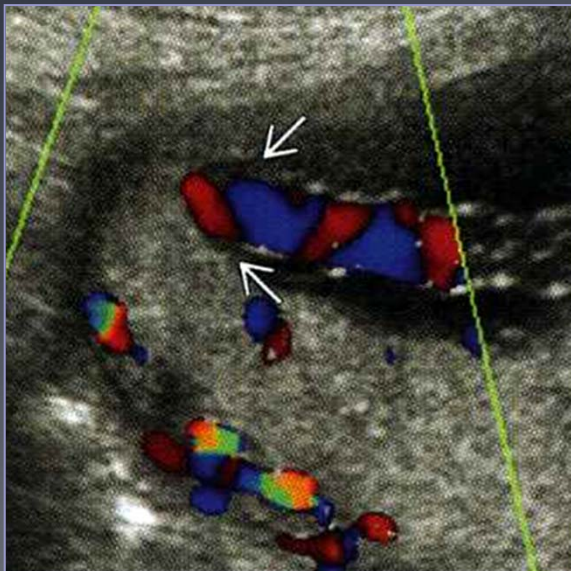
- Usare Color Doppler: funicolo adiacente alla placenta
- Vasi possono apparire dilatati
- Vasi separati dal margine placentare
- Vasi sono estremamente fragili!!
- Possono essere VASI PREVI

LESSI FETALI: CORDONE OMBELICALE

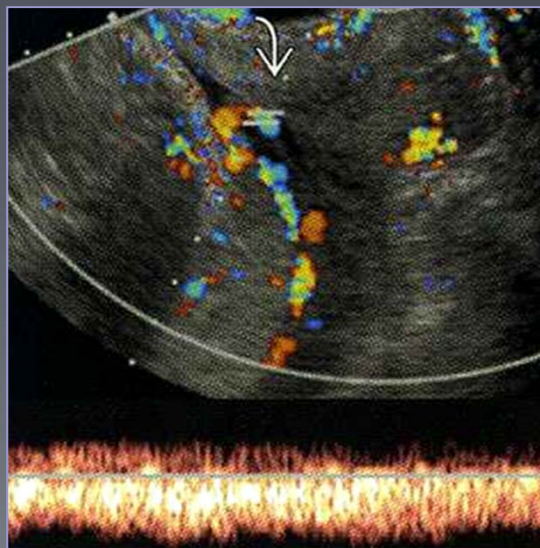


INSERZIONE VELAMENTOSA

TIPI DI INSERZIONE DIFFERENZIALE



INSERZIONE MARGINALE



LESIONI FETALI: CORDONE OMBELICALE

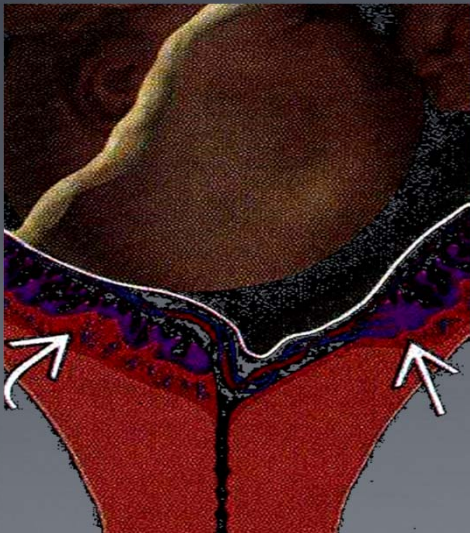


PLACENTA PREVIA

Vasi fetali sottomembranosi a ridosso dell' OUI

>> Associati a PLACENTA SUCCENTURIATA

INSERZIONE VELAMENTOSA del funicolo



LESSI FETALI: CORDONE OMBELICALE



ASA PREVIA

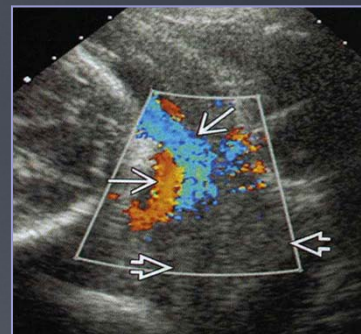
ANOSI ECOGRAFICA:

Eseguire ecografia TV con Doppler flussimetria → Doppler fetale !!

Identificare lobi accessori o inserzione velamentosa



- 60-80% mortalità
- TAGLIO CESAREO!!



LESSI FETALI: CORDONE OMBELICALE

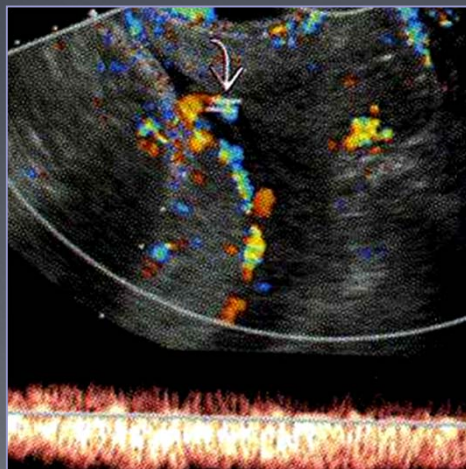


ASA PREVIA

IOSI DIFFERENZIALE



Presentazione del
CORDONE OMBELICALE



VASI DI
PLACENTA PREVIA

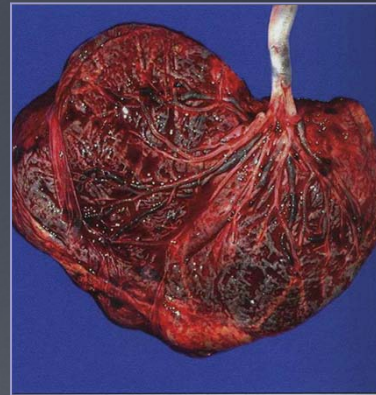
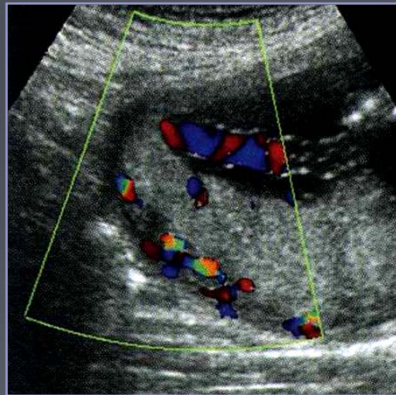
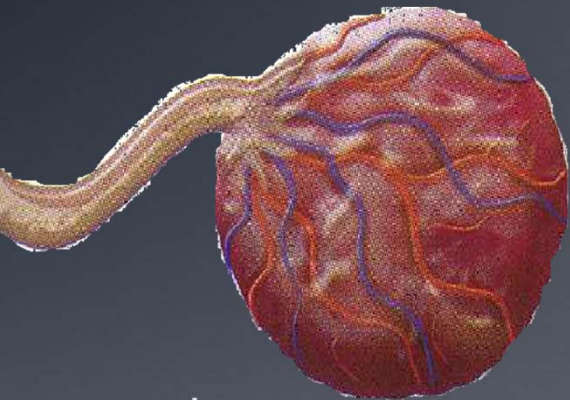


VASI UTERINI

TIPI DI INSERZIONI FETALI: CORDONE OMBELICALE



INSERZIONE MARGINALE



Inserzione del cordone ombelicale a 2 cm dal margine placentare: inserzione marginale/eccentrica del cordone (Placenta a racchetta)

Cercare sempre l'inserzione del funicolo sulla superficie placentare!!

Usare Doppler per identificare uscita dei vasi nel cordone

Raramente evolve in velamentosa

TIPI DI INSERZIONE FETALI: CORDONE OMBELICALE

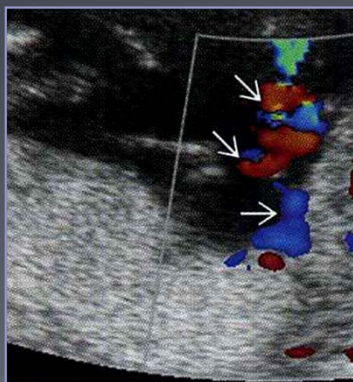


INSERZIONE MARGINALE

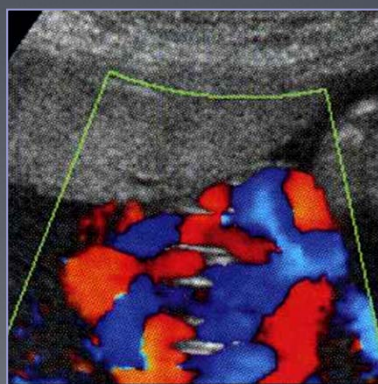
INSERZIONE MARGINALE



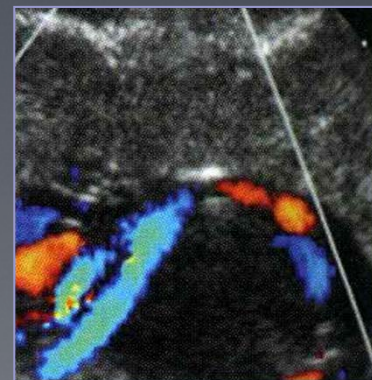
INSERZIONE
MARGINALE



INSERZIONE
VELAMENTOSA



CORDONE
ADIACENTE

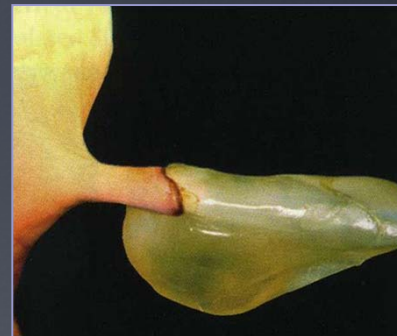
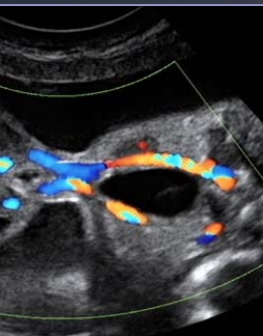


CORDONE

LESIONI FETALI: CORDONE OMBELICALE



CISTI DEL CORDONE OMBELICALE



associate al cordone ombelicale

- Parassiali (60%)
- Assiali (40%) – dislocano i vasi ombelicali

- Inserzione parete addominale fetale (28%)
- Inserzione placentare (33%)
- Lungo il cordone (39%)

- Cisti semplici anecogene a parete sottile
- Diametro e forma variabili
- Spesso transitorie (prognosi eccellente)

ANOMALIE FETALI: CORDONE OMBELICALE



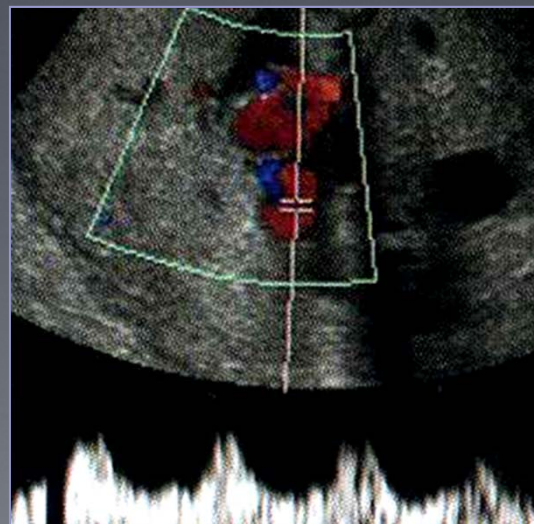
ANOMALIE DEL CORDONE OMBELICALE

ANOMALIE DIFFERENZIALE

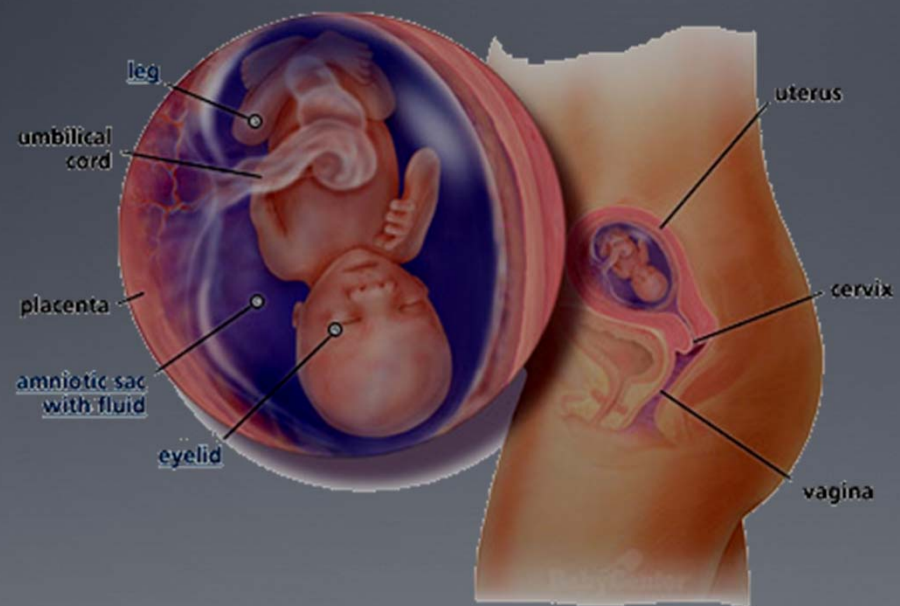
Aneurisma dell'arteria ombelicale

Arterie soprannumerarie

Ematoma del cordone ombelicale



MESSI FETALI: LIQUIDO AMNIOTICO



MESSI FETALI: LIQUIDO AMNIOTICO

VALUTAZIONE DELLA QUANTITÀ

OGGETTIVA

“... è sufficiente una valutazione soggettiva (quantità normale, ai limiti inferiori della norma, oligoamnios ecc.)...”

(SIEOG 2006)

QUANTITATIVA

TASCA MASSIMA

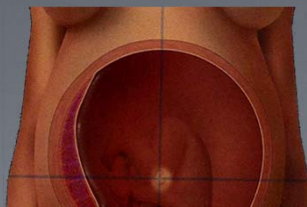
Tasca massima: 2-8 cm: normale
Tasca massima < 2 cm: oligoidramnios
Tasca massima > 8 cm: polidramnios

AFI

Somma delle 4 tasche massime dei 4 quadranti

<4: anidramnios
<5: oligoidramnios
6-18: normale
>18: polidramnios

1 cm AFI = 30 mL



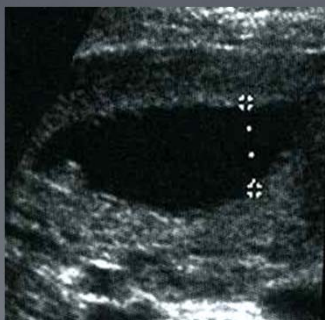
ANOMALIE FETALI: LIQUIDO AMNIOTICO

OLIGOIDRAMNIO

Definizione del liquido amniotico

AFI < 5 cm

Tasca massima < 2 cm



- Idiopatico: raro
- Gravidanza oltre il termine
- Escludere PPRM
- Visualizzare vescica (anomalie GU)
- Controllare crescita fetale (IUGR)
- Considerare patologia materna (ipertensione, preclampsia, malattie autoimmuni...)
- Frequente follow up AFI (bisettimanale)

Tasca massima verticale, priva di:

Contenuto fetale (USAFE DOPPLER)

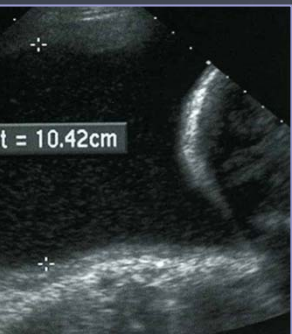
DIAGNOSI FETALI: LIQUIDO AMNIOTICO

POLIDRAMNIOS

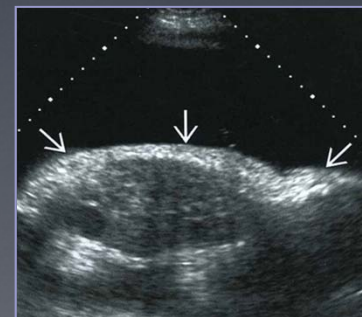
Incremento del liquido amniotico

AFI > 18 cm

Tasca massima > 8 cm



- Idiopatico (2/3) → buona prognosi
- Associato a diabete → macrosomia
- Malattie SNC, GI, cardiache, disp. scheletriche
- Idrope
- Controllare crescita fetale (macrosomia)
- Frequente follow-up AFI (bisettimanale)
- Può causare PPROM, PTD



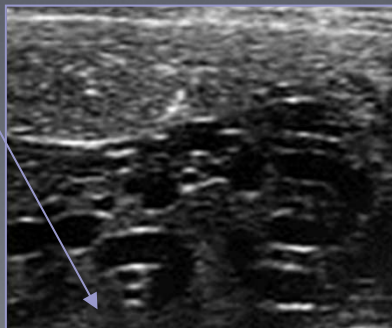
DIAGNOSI FETALI: LIQUIDO AMNIOTICO

Nelle gravidanze gemellari biamniotiche:

- Polidramnios: TASCA MASSIMA ≥ 8 cm;
- Oligoidramnios: TASCA MASSIMA ≤ 2 cm



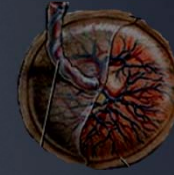
Liquido amniotico "corpuscolato" → NON ha significato clinico



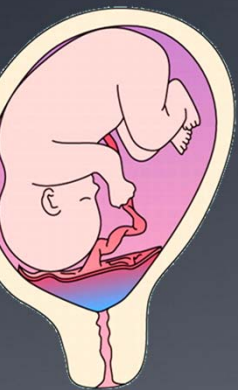


grazie

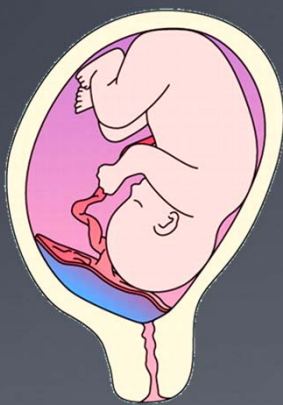
TIPI DI PRESSIONI FETALI: PLACENTA



PLACENTA PREVIA



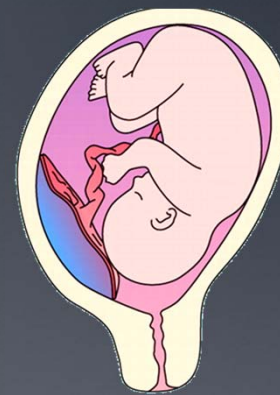
CENTRALE



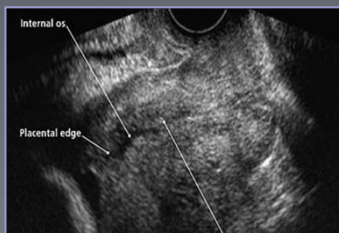
PARZIALE



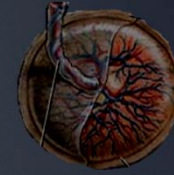
MARGINALE



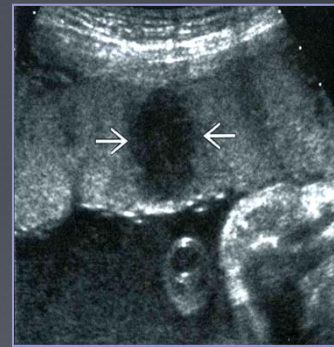
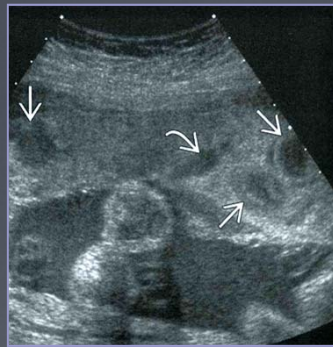
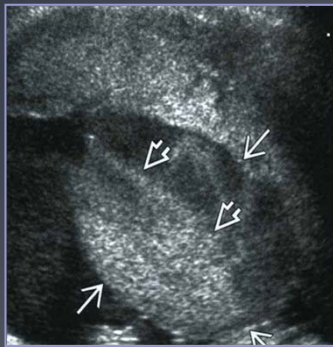
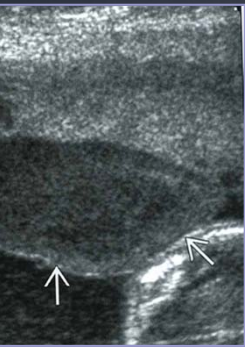
“BASSA”



LESSI FETALI: PLACENTA



LACUNE PLACENTARI



aree ipoecogene placentari NON patologiche

presente flusso sanguigno turbolento (materno) → trombi intervillosi → deposito di fibrina

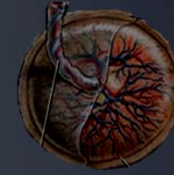
angole o multiple

subcorioniche, intraplacentari o sulla superficie fetale

dimensioni variabili

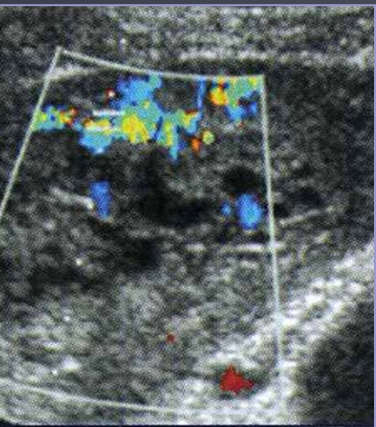
color Doppler presente (flusso turbolento o lento) o assente se trombizzato

LESSI FETALI: PLACENTA



LACUNE PLACENTARI

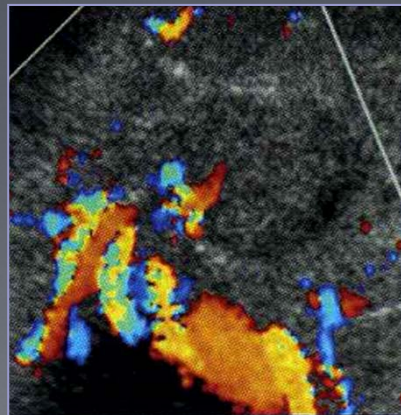
GNOSI DIFFERENZIALE



MOLA



MOLA



CORIONANGIOMA



ANOMALIE FETALI: CORDONE OMBELICALE

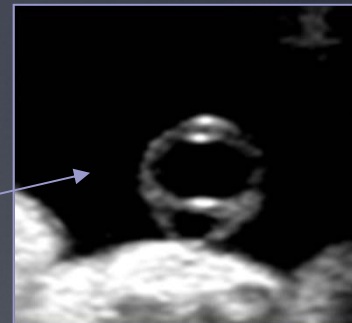


ARTERIA OMBELICALE SINGOLA

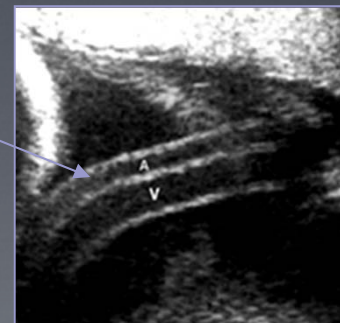
Assenza dell'arteria ombelicale sinistra (70%) o destra (30%)

ASPECTI ECOGRAFICI:

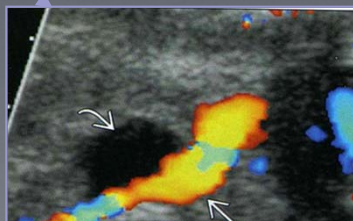
Visualizzazione trasversale cordone : 2 soli vasi (arteria >>)



Visualizzazione longitudinale cordone: 2 vasi longitudinali



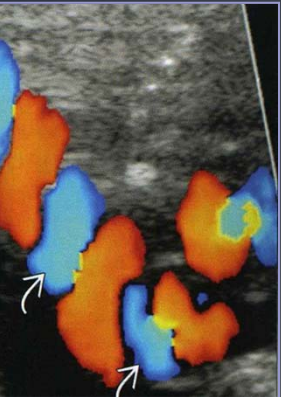
Visualizzazione trasversale vescica: 1 sola a. ombelicale al Color Doppler



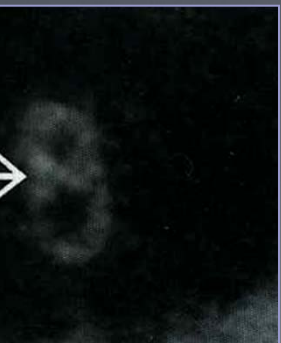
ANOMALIE FETALI: CORDONE OMBELICALE



ANOMALIA OMBELICALE SINGOLA



- 15% sviluppano IUGR (Eseguire follow up ecografico!!)
- Associato a T13 e T18
- NON associato a T21
- Cercare altre anomalie morfologiche (cardiache, renali)



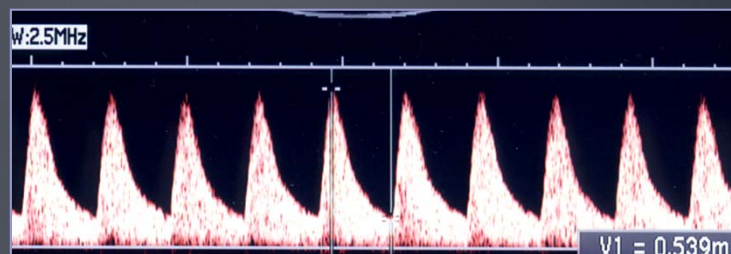
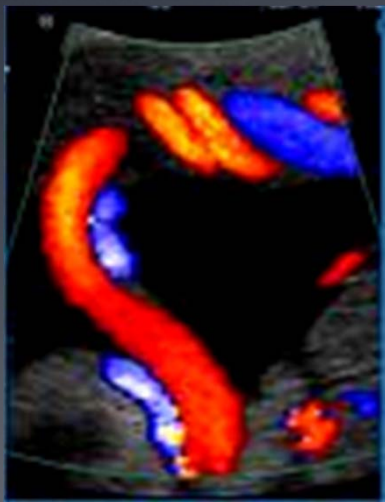
➤ DIAGNOSI DIFFERENZIALE

- 1- Eccessiva gelatina di Wharton
- 2- Trombosi dei vasi ombelicali
- 3- Arterie ombelicali fuse

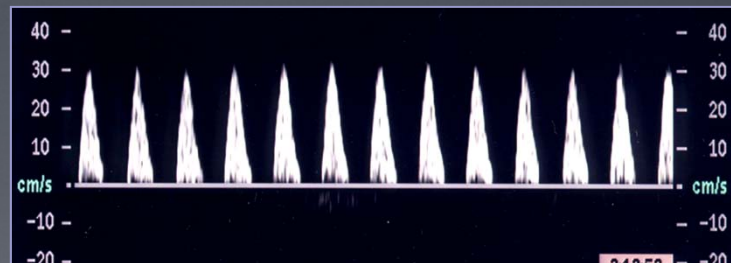
DIAGNOSI FETALI: CORDONE OMBELICALE



PER FLUSSIMETRIA



FLUSSO NORMALE



ASSENZA FLUSSO IN DIASTOLE

