

VM106 Histopathology of the Placenta

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Group 1: Chorioamnionitis

Slides 1 and 2: 31 year old G2 P1001 with postpartum temperature of 39.2

Diagnoses (1) Acute subchorionitis (maternal stage 1/3)
(2) Umbilical phlebitis (fetal stage 1/3)

Slide 3: 25 year old G2 P1001 with prolonged premature rupture of membranes

Diagnoses Acute chorioamnionitis (maternal stage 2/3)

Slide 4: 17 year old G2 P0010 delivered at term by emergency c-section.

Diagnoses Umbilical arteritis/ panvasculitis (fetal stage 2/3)

Slide 5: 15 year old G1 P0 at 23 weeks with oligohydramnios

Diagnoses Necrotizing chorioamnionitis (maternal stage 3/3)

Slides 6 and 7: 26 year old G1 P0 with foul smelling, meconium-stained amniotic fluid

Diagnoses (6) Umbilical perivasculitis/ necrotizing funisitis (fetal stage 3/3)
(7) Severe chorioamnionitis/ subchorionic microabscesses (maternal grade 2/2)

Slide 8: 31 year old G2 P0010 at 39 weeks with intrapartum fever

Diagnoses Intense chorionic vasculitis (fetal grade 2/2)

Slide 9: 33 year old with prolonged rupture of membranes and fever

Diagnoses Fetal vasculitis with non-occlusive chorionic vessel thrombi

Slide 10: 30 year old at 26 weeks gestation

Diagnoses Subacute chorioamnionitis

Slide 11: 24 year old with preterm labor. Infant with erythematous rash

Diagnoses *C. albicans* - associated peripheral funisitis

Slide 12: 20 year old G4 P1021 with stillborn at 25 weeks

Diagnoses *L. monocytogenes* - associated acute intervillitis

Group 2: Meconium Effects

Slide 40: 22 year old G4 P1021 at 37 weeks with hypothyroidism and thick meconium

Diagnoses Meconium associated vascular necrosis
Abundant pigment laden chorionic plate macrophages
Acute chorionic vasculitis
Non-occlusive chorionic vessel thrombus (some sections)

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Group 3: Maternal Vascular Underperfusion

Slide 17: 34 year old G4P3003 with chronic hypertension and preeclampsia
Diagnoses Acute atherosclerosis (fibrinoid necrosis), decidual arterioles

Slide 18: 33 year old G1 P0 at 37 weeks with gestational hypertension
Diagnoses Mural hypertrophy, decidual arterioles

Slide 19: 37 year old G1 P0 with severe preeclampsia and IUGR at 33 weeks
Diagnoses Findings consistent with maternal underperfusion:
Increased syncytial knots
Villous agglutination
Increased intervillous fibrin

Slides 20 and 21: 31 year old at 33 weeks with maternal lymphoma and fetal IUGR
Diagnoses (20) Distal villous hypoplasia
Persistent mural smooth muscle, basal plate arteries (some slides)
(21) Villous infarcts (old)
Acute atherosclerosis of basal plate arteries

Slide 22: 21 year old G1 P0 at 28 weeks with severe preeclampsia
Diagnoses Recent (subacute) villous infarct
Distal villous hypoplasia

Slide 23: 26 year old G4 P3003 at 37 weeks with gestational hypertension
Diagnoses Villous infarct with central hemorrhage
Basal plate artery thrombus

Group 4: Retroplacental Hemorrhage (Abruptio)

Slide 25: 25 year old G1 P with chronic hypertension, preeclampsia, and fever
Diagnoses Abruptio placenta
Acute atherosclerosis of basal plate arteries

Slides 26: 17 year old G1 P0 with vaginal bleeding and positive "Tox" screen
Diagnoses Recent retroplacental hemorrhage with intradecidual extension

Slide 27: 21 year old G2 P1001 with intrapartum fetal death at 24 weeks
Diagnoses Recent retroplacental hemorrhage with villous stromal hemorrhage

Slide 28: 15 year old G1 P0 with vaginal bleeding and abruptio placenta
Diagnoses Acute peripheral separation/ marginal abruptio

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Slide 29: 19 year old at 25 weeks with rupture of membranes and vaginal bleeding for 5 days

**Diagnoses Findings consistent with chronic peripheral separation/ abruption:
Old marginal hematoma
Chorioamnionic hemosiderosis**

Group 5: Chronic Villitis

Slide 13: 2 year old with stillborn at 21 weeks

Diagnoses Cytomegalovirus villitis

Slide 14: 35 year old G3 P1011 with fever. 3.8 Kg infant with Apgars 4/9

Diagnoses Chronic villitis, grade 2/2

Slide 15: 29 year old G4 P0211 with premature labor at 35 weeks

Diagnoses Basal villitis with lymphoplasmacytic deciduitis

Group 6: Fetal Vascular Obstructive Lesions

Slide 30: 22 year old at 37 weeks with emergency C-section during induction for IUGR

**Diagnoses Avascular villi, large focus
Stem villous thrombus**

Slide 31: 28 year old G1 P0 at 35 weeks with late decelerations

**Diagnoses Villous stromal vascular karyorrhexis
Fibromuscular sclerosis, stem villous vessels**

Slide 32: 31 year old at term with Apgars 3 and 5

Diagnoses Avascular villi, multiple small foci

Slide 33: 35 year old G6 P2133

Diagnoses Chronic villitis with obliterative fetal vasculopathy

Slide 34: 38 year old G1 P0 at 35 weeks with HELLP syndrome

Diagnoses Intimal fibrin cushion, recent

Group 7: Fetal Villous Capillary Lesions

Slide 39: 32 year old G1 P0 at 35 weeks with macrosomia and premature membrane rupture

Diagnoses Villous chorangiomas

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Group 8: Increased Fetal Nucleated Red Blood Cells/Fetal Anemia

Slide 38: 25 year old G3 P1011 at term with diabetes and repetitive late decelerations

Diagnoses Increased circulating fetal NRBC (Grade 2/3)

Slide 24: 37 year old G4 P2012 at 37 weeks with C-section for fetal distress

Diagnoses Intervillous thrombus (hematoma)

Group 9: Massive Perivillous Fibrin

Slide 35: 21 year old G1 P0 at 34 weeks with hypertension and IUGR

**Diagnoses Basal perivillous fibrin(oid) deposition
(with abundant intermediate trophoblast)**

Slide 36: 35 year old G4 P1122 at 37 weeks with severe IUGR

**Diagnoses Diffuse perivillous fibrin(oid) deposition
(Maternal floor infarction pattern)**

Slide 37: 37 year old at term with C-section for fetal distress (Apgars 8/8)

Diagnoses Perivillous fibrin(oid) plaque