

Figure 1. Focal edema in the maternal part of a 22 gestational week placenta
 Note cells of extra-villous (peripheral) trophoblast and obliterated blood vessels (*). Mother 20 years of age, vaginal delivery of a girl of 540g. The girl presented favorable clinical course for the gestation.
 Study group G2 (normal pre-term) HE, X 250

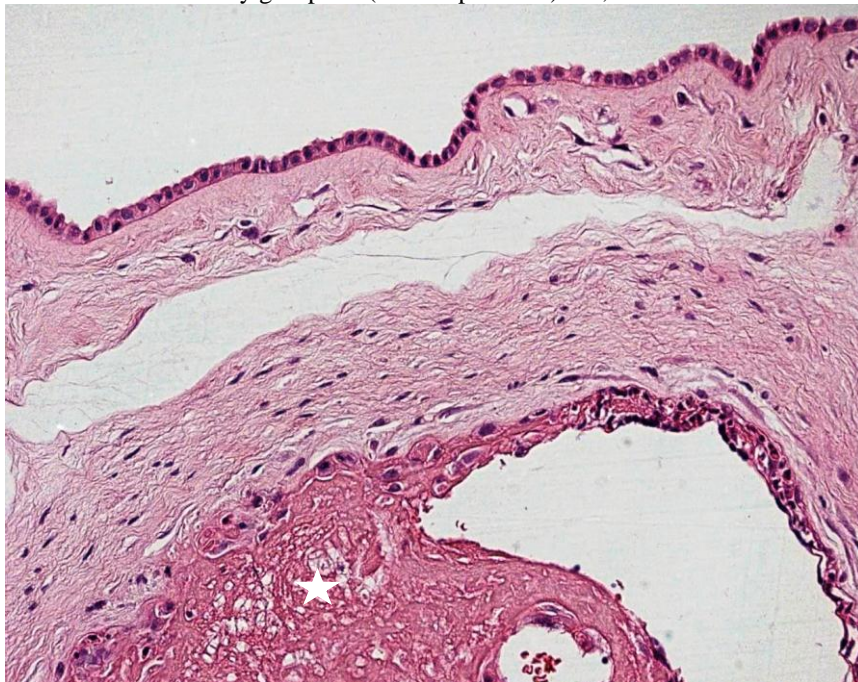


Figure 2. Fetal part of a 22 gestational week placenta with amniotic epithelium, extraembryonic mesoderm, chorion and fibrionoid (*)
 Mother 20 years of age, clinically low risk pregnancy, vaginal delivery of a girl of 540g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
 HE, X 250

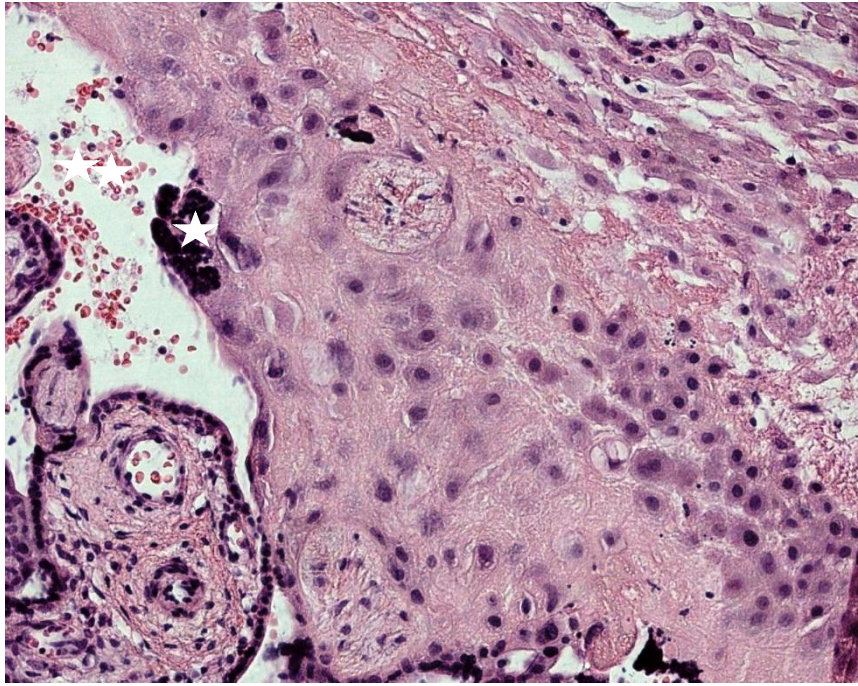


Figure 3. Maternal part and tertiary villi of a young placenta of 23 gestational weeks
 Note cells of extravillous trophoblast, edema, proliferation buds (*). Tertiary villi are covered with cytotrophoblast, in some areas is seen syncytiotrophoblast. Note also inflammatory cells in the intervillous space (**). Mother 36 years of age, vaginal delivery of a boy of 650g. The boy died on the 3rd day of life due to extreme prematurity. Study group G2 (normal pre-term)
 HE, X 250

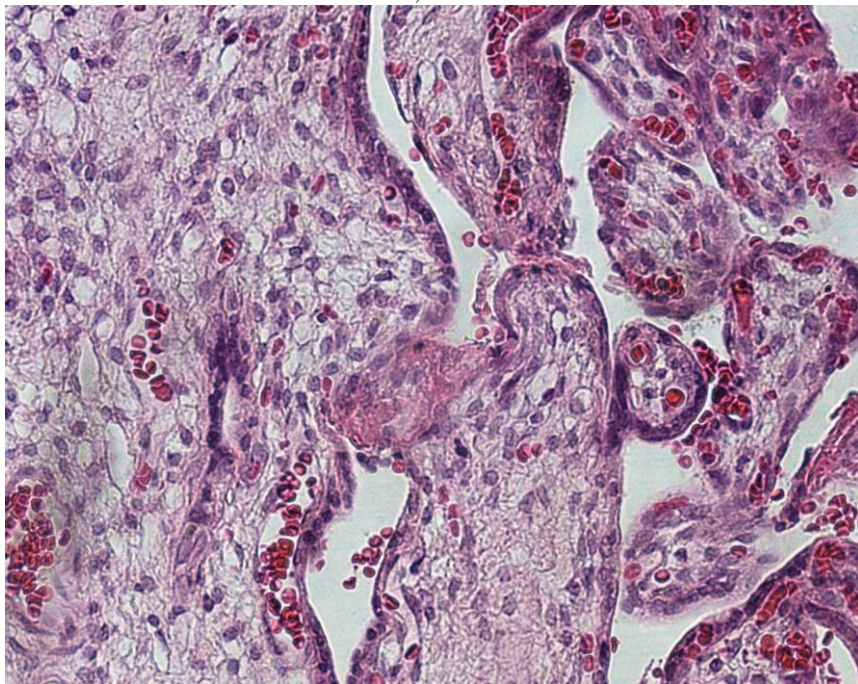


Figure 4. Edema and plethora of the tertiary villi of a transitional placenta of 28 gestational weeks
 Mother 34 years of age, low risk pregnancy, vaginal delivery of a girl of 1290g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
 HE, X 250

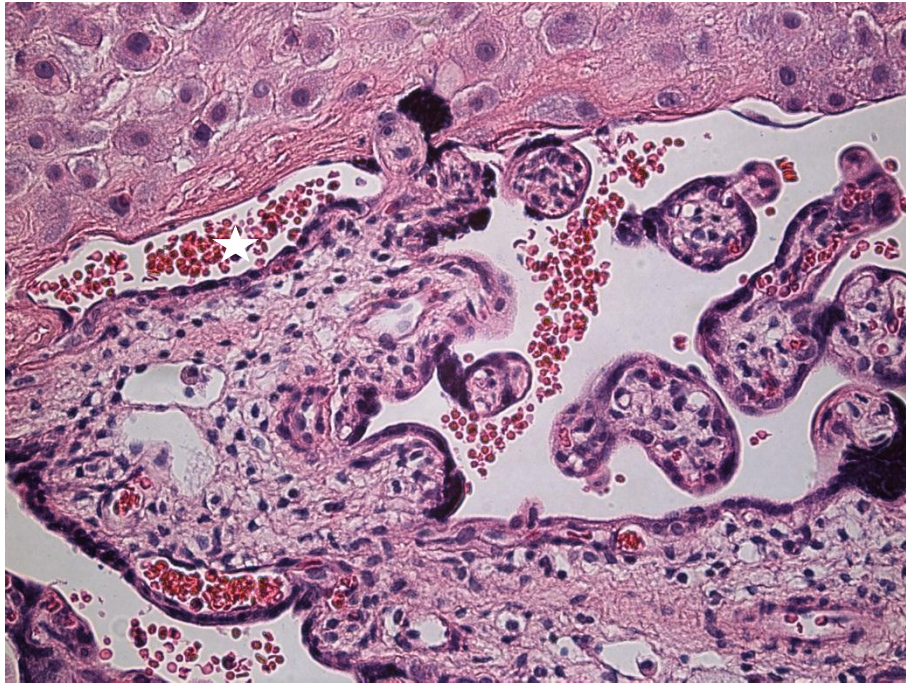


Figure 5. Maternal part, an edematous anchoring villi and tertiary villi of a transitional placenta of 28 gestational weeks

Note large sinusoid at the basement of anchoring villi (*), from the villi side covered with cytotrophoblast cells. Mother 25 years of age, vaginal delivery of a girl of 1360g. Favorable clinical course for the gestation. Study group G2 (normal pre-term)

HE, X 250

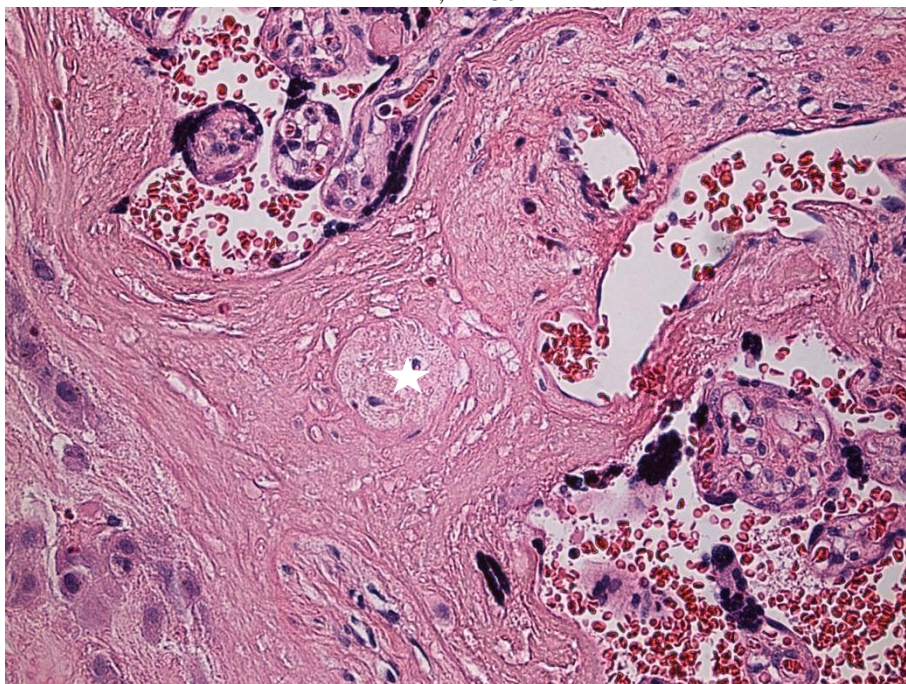


Figure 6. Maternal part and tertiary villi of an old placenta of 40 gestational weeks

Note completely obliterated sinusoid capillaries (*) in the anchoring villi. Mother 21 years of age, vaginal delivery of a girl of 3670g. The girl was healthy, discharged home. Study group G1 (healthy term)

HE, X 250

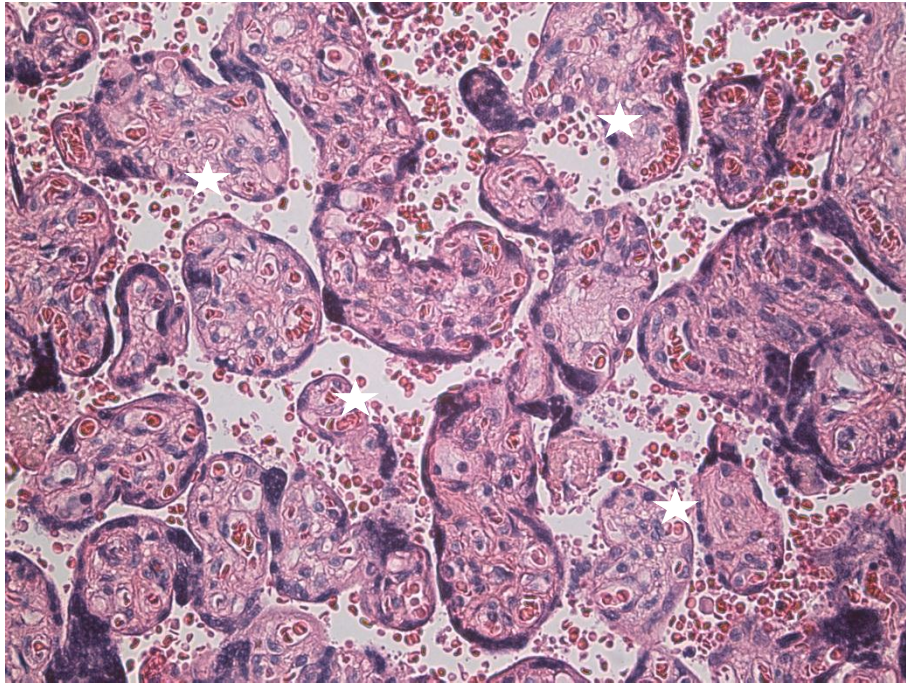


Figure 7. Tertiary villi of a 40 gestational weeks placenta with signs of ageing: degeneration of trophoblast (*), presence of numerous sinusoid capillaries
Mother 21 years of age, vaginal delivery of a girl of 3670g. The girl was healthy, discharged home.
Study group G1 (healthy term). HE, X 250.

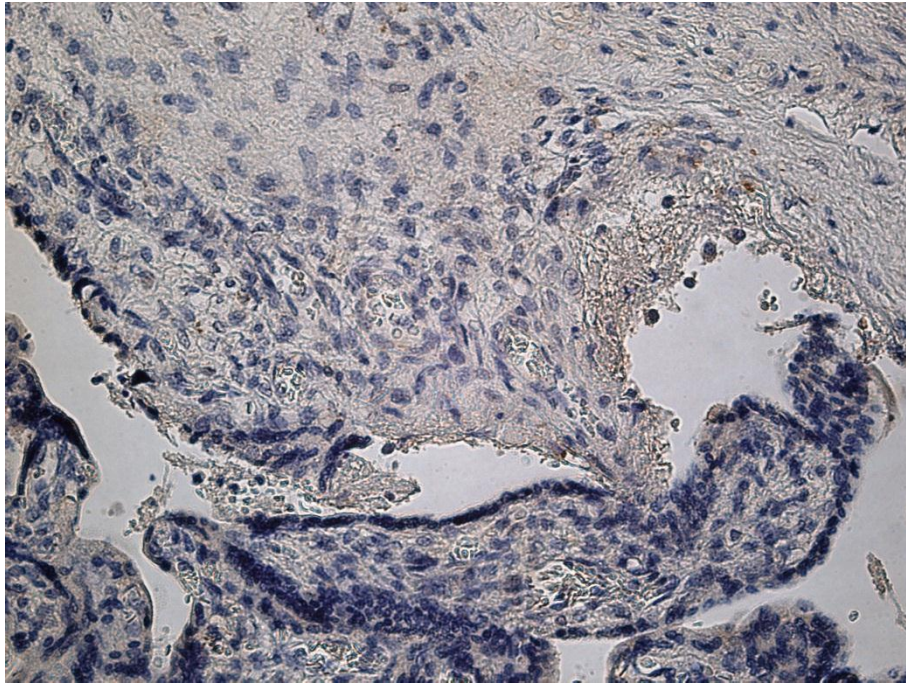


Figure 8. Maternal part and tertiary villi of a transitional placenta of 28 gestational weeks with occasional (0/+) IGF1 containing cytotrophoblast cells
 Mother 37 years of age, vaginal delivery of a girl of 1410g. The girl presented favorable clinical course for the gestational age. Study group G2 (normal pre-term)
 IGF1 IHC, X 250

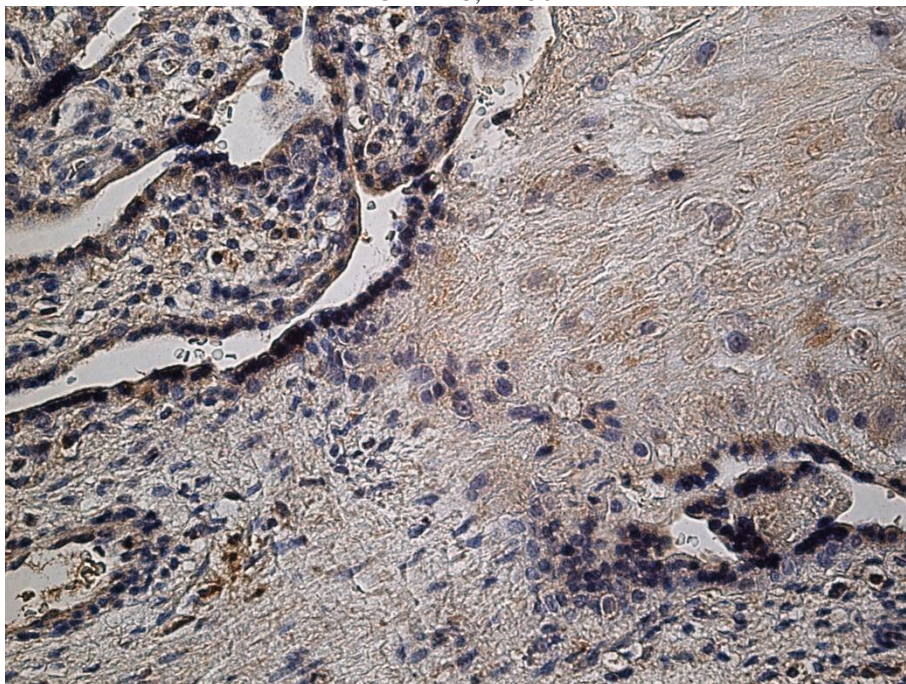


Figure 9. Tertiary villi of a young placenta of 23 gestational weeks with moderate number (++) of IGF1 containing cells of Höfbauer, cytotrophoblast and syncytiotrophoblast

Weak immuno-reactivity of IGF1 in the Hofbauer cells, stronger in the cytotrophoblast. Mother 36 years of age, vaginal delivery, a boy of 650g. The boy died on the 3rd day of life due to extreme prematurity.
 Study group G2 (normal pre-term)
 IGF1 IHC, X 250.

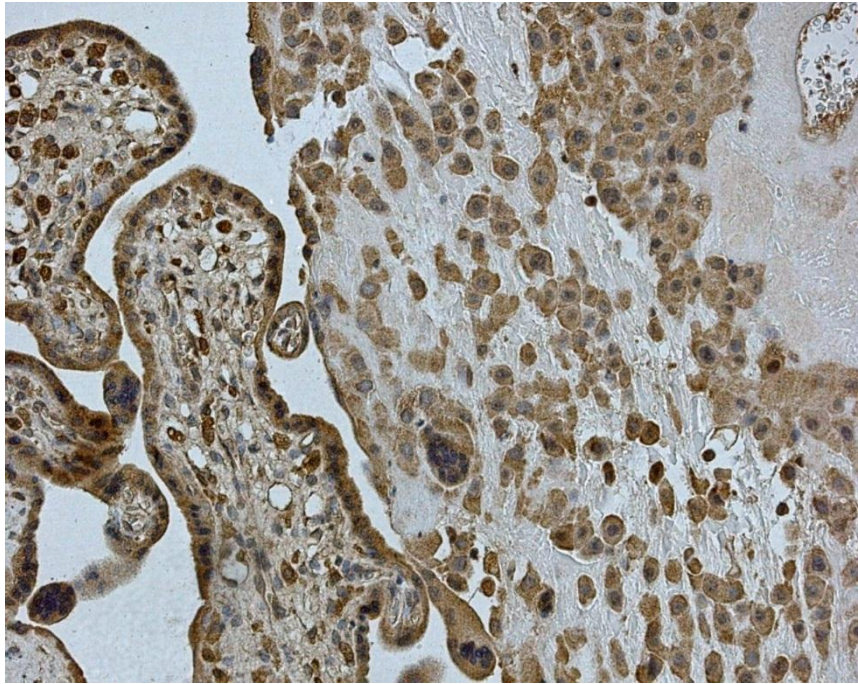


Figure 10. Maternal part and tertiary villi of a young placenta of 22 gestational weeks with abundance (+++++) of IGF1 containing cells of extravillous trophoblast and cytotrophoblast

Mother 20 years of age, vaginal delivery of a girl of 540g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
IGF1 IHC, X 250.

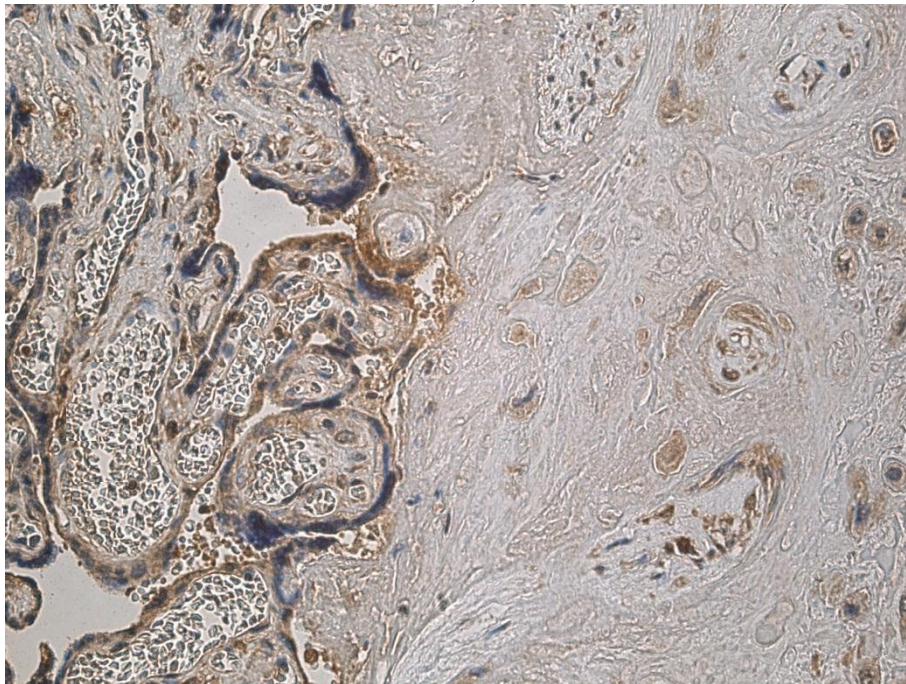


Figure 11. Maternal part and tertiary villi of a transitional placenta of 40 gestational weeks with few (+) IGF1 containing cells of extravillous trophoblast, cytotrophoblast and syncytiotrophoblast

Mother 25 years of age, vaginal delivery, a boy of 4330g. The boy developed early neonatal sepsis with pneumonia and meningitis, the causative agent was not identified. Study group G3 (distress)
IGF1 IHC, X 250

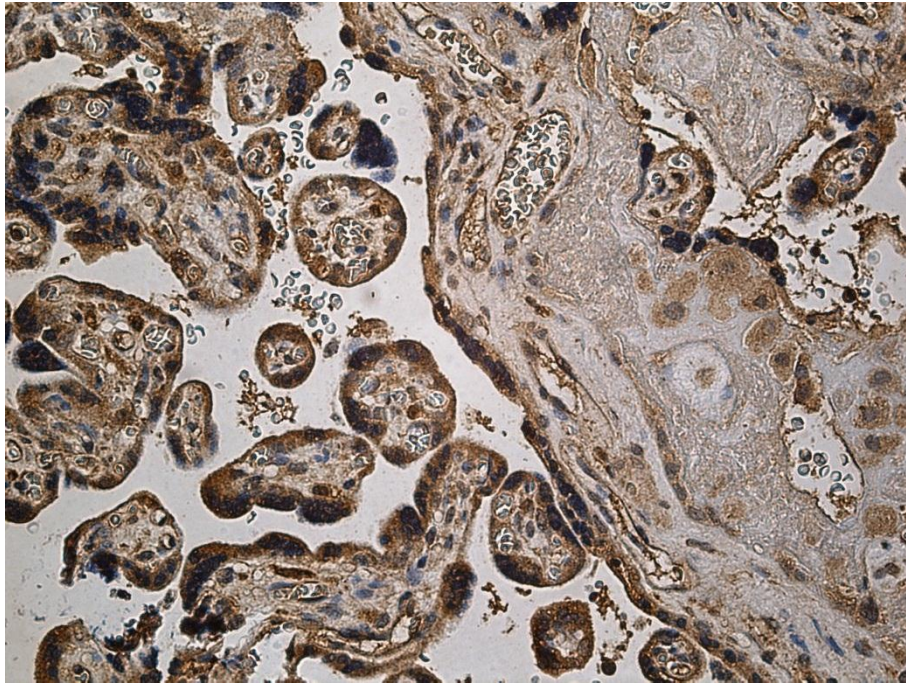


Figure 12. Tertiary villi of a transitional placenta of 35 gestational weeks with numerous (+++) IGF1 containing cells of Höfbauer, cytotrophoblast and syncytiotrophoblast

Note a zone of infarction (*) and plethoric sinusoid capillaries. Mother 30 years of age with preeclampsia, delivery by emergency Cesarean section of a boy of 1920g. The boy presented appropriate clinical course for the gestation and birth weight and was discharged home in 7 days.

Study group G3 (distress)

IGF1 IHC, X 250

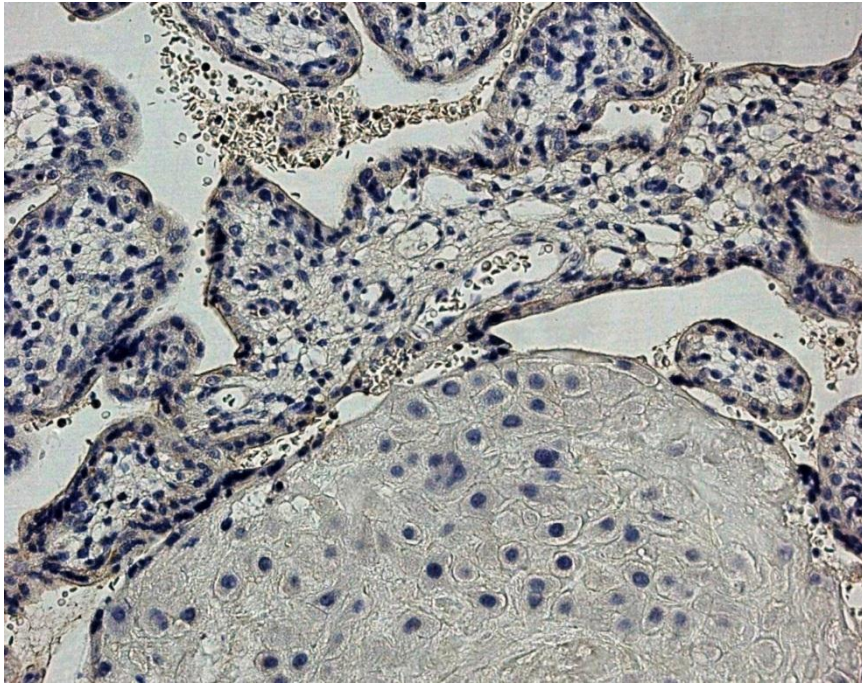


Figure 13. Maternal part and edematous villi of a young placenta of 23 gestational weeks with occasional (0/+) IGFR1 containing cytotrophoblast cells (*); weak immunoreactivity. Mother 36 years of age, vaginal delivery of a boy of 650g. The boy died on the 3rd day of life due to extreme prematurity. Study group G2 (normal pre-term)
IGFR1 IHC, X 250

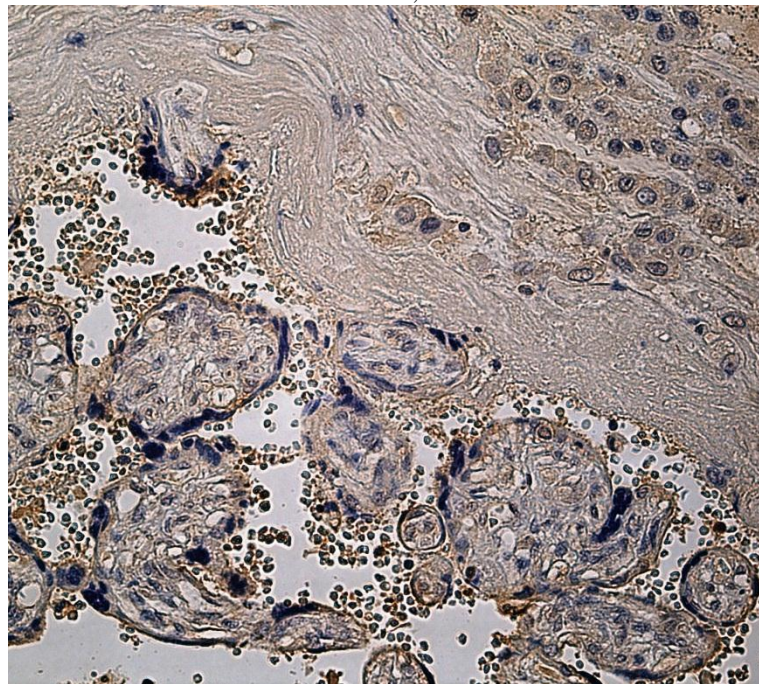


Figure 14. Maternal part and tertiary villi of a transitional 34 gestational weeks placenta with few (+) IGFR1 containing cells of Höfbauer, extravillous trophoblast and cytotrophoblast
Mother 29 years of age, vaginal delivery of a girl of 2390g. The girl presented appropriate clinical course for the gestational age. Study group G2 (normal pre-term)
IGFR1 IHC, X 250.

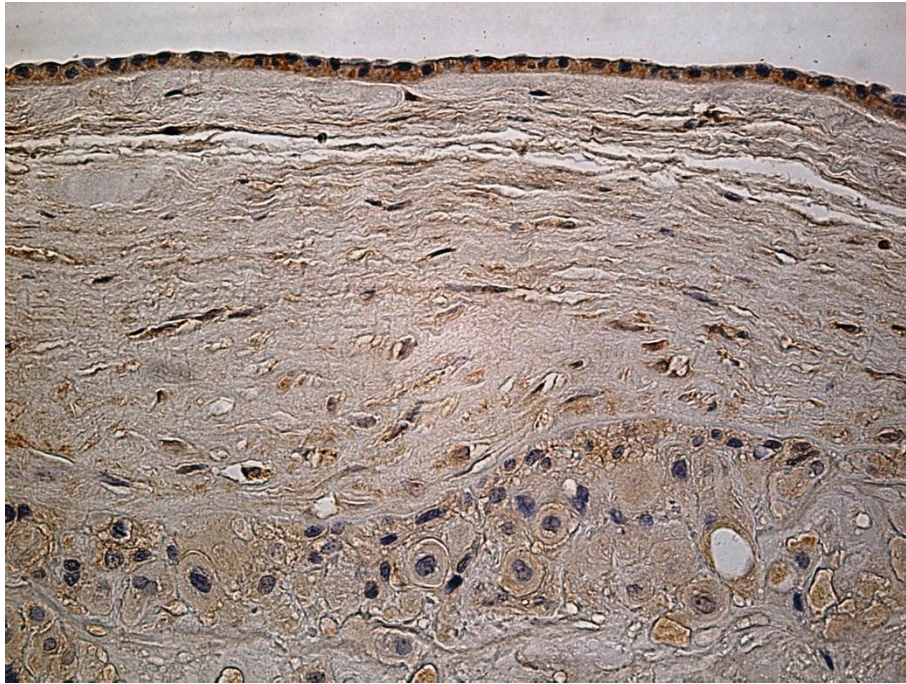


Figure 15. Fetal part of a 34 gestational weeks placenta with few (+) IGFR1 positive cells of Hofbauer and subchorionic trophoblast (*); weak IGFR1 immunoreactivity

Note stronger IGFR1 immunoreactivity of the amniotic epithelium. Mother 29 years of age, vaginal delivery of a girl of 2390g. The girl presented appropriate clinical course for the gestational age. Study group G2 (normal pre-term)
IGFR1 IHC, X 250.

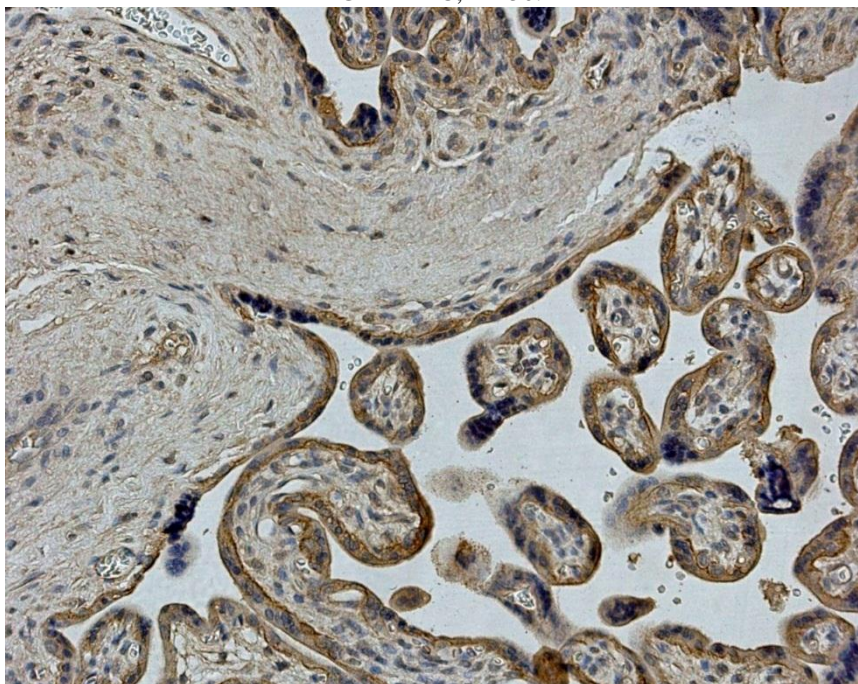


Figure 16. Tertiary villi of a young placenta of 22 gestational weeks with abundance (+++++) of IGFR1 containing cells of cytotrophoblast and syncytiotrophoblast

Mother 20 years of age, vaginal delivery of a girl of 540g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
IGFR1 IHC, X 250

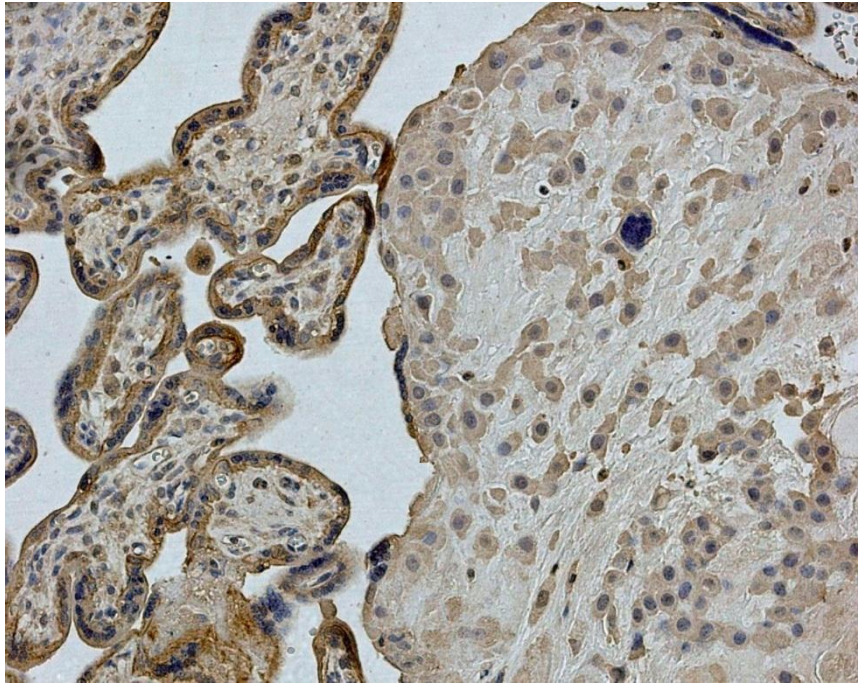


Figure 17. Maternal part and tertiary villi of a young placenta of 22 gestational weeks with abundance (++++) of IGFR1 containing cells of Höfbauer, extravillous trophoblast, cytotrophoblast and syncytiotrophoblast

20 years of age mother, vaginal delivery of a girl of 540g. Girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
IGFR1 IHC, X 250

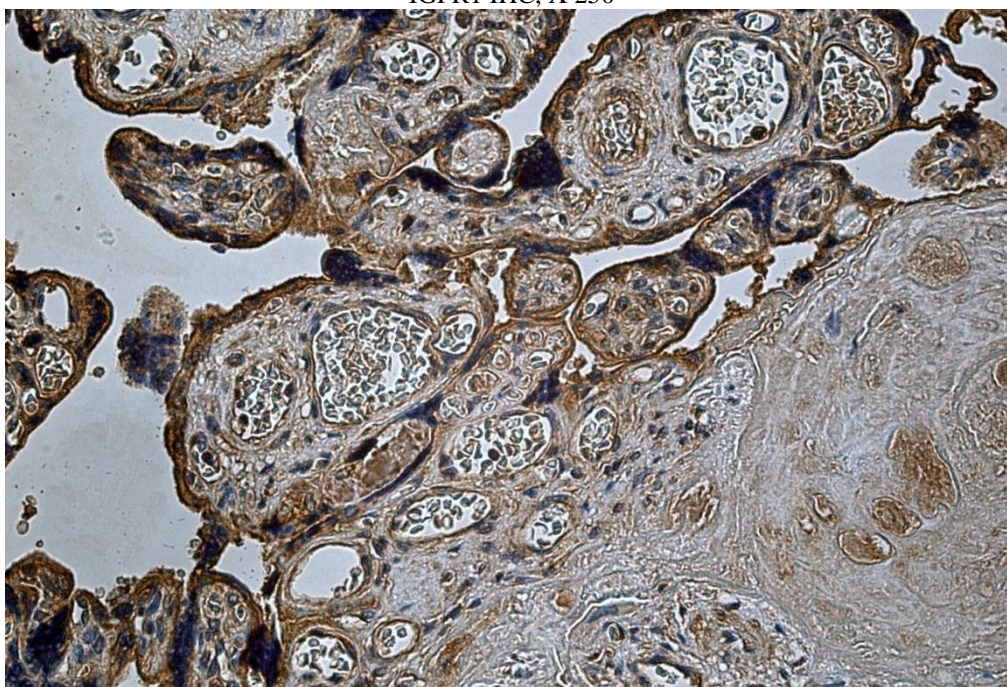


Figure 18. Maternal part and tertiary villi of a transitional placenta of 40 gestational weeks with numerous (+++) IGFR1 containing cells of Höfbauer, cytotrophoblast and syncytiotrophoblast

Mother 25 years of age, vaginal delivery of a boy of 4330g. The boy developed early neonatal sepsis with pneumonia and meningitis. Study group G3 (distress)
IGFR1 IHC, X 250.

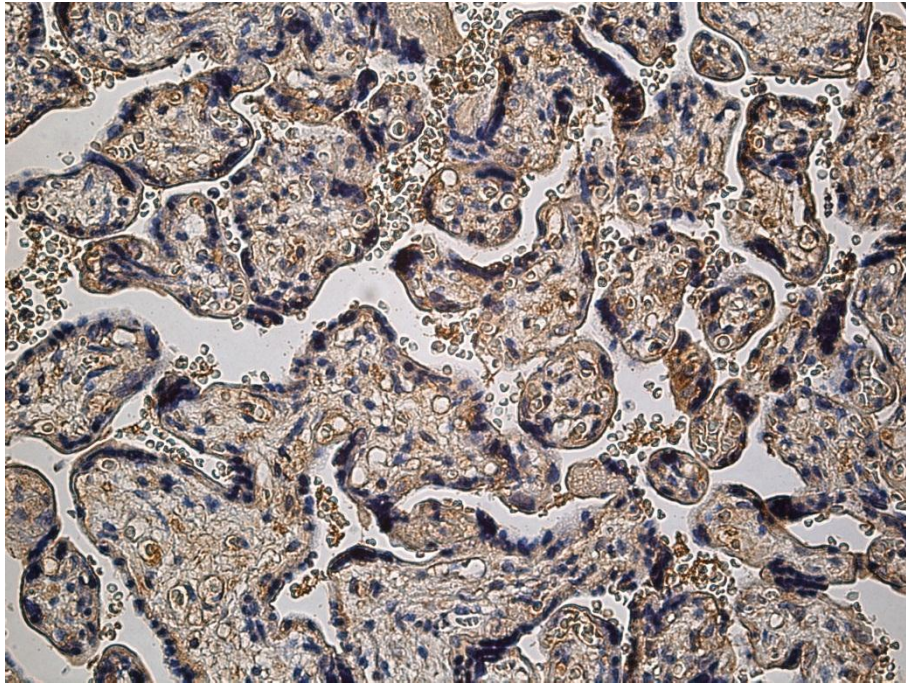


Figure 19. Tertiary villi of a transitional placenta of 37 gestational weeks with few (+) HGF containing cells of cytotrophoblast and syncytiotrophoblast

Note the large number of sinusoid capillaries. Mother 30 years of age, vaginal delivery of a girl of 2740g. The girl was healthy, discharged home in 7 days. Study group G1 (healthy term)
HGF IHC, X 250.

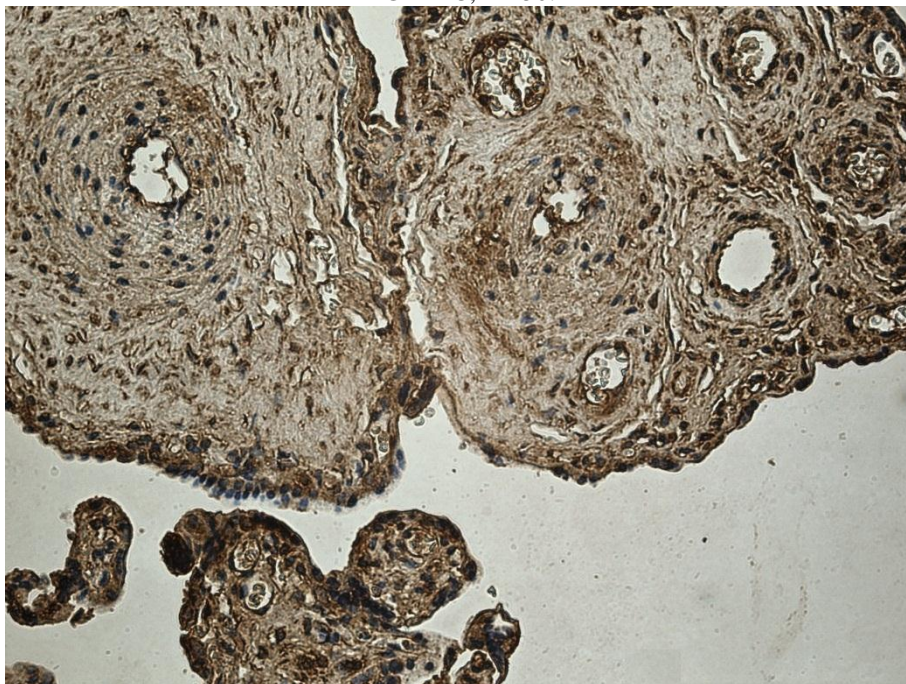


Figure 20. Tertiary villi of a transitional placenta of 40 gestational weeks with moderate amount (++) of HGF containing cells of cytotrophoblast

Mother 39 years of age, vaginal delivery of a boy of 4180g. The boy was healthy, discharged home in 7 days. Study group G1 (healthy term)
HGF IHC, X 250.

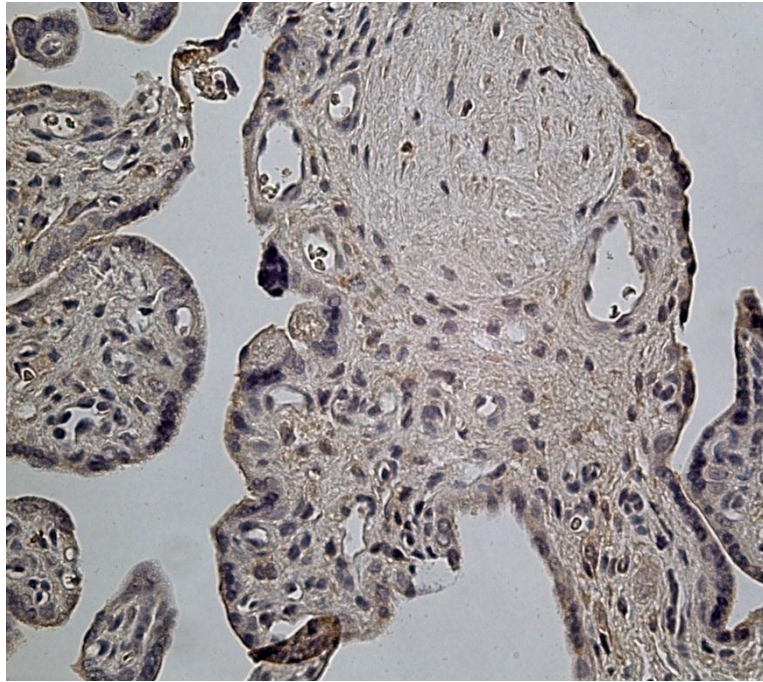


Figure 21. Maternal part and tertiary villi of a transitional placenta of 24 gestational weeks with few (+) HGF containing cells of cytotrophoblast and Höfbauer
 Mother 30 years of age, vaginal delivery of a girl of 720g. The girl presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)
 HGF IHC, X 250

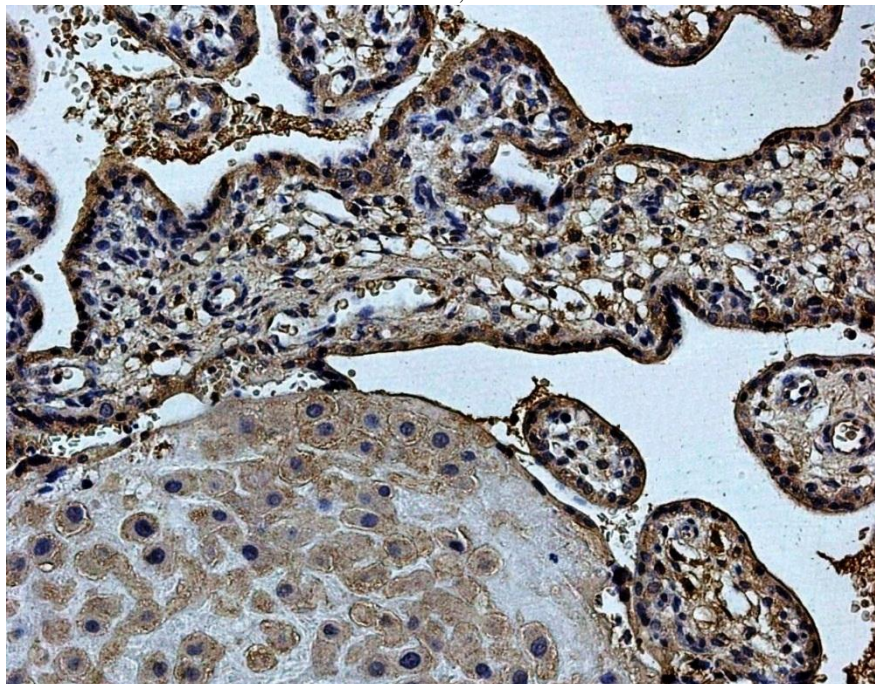


Figure 22. Maternal part and edematous villi of a young 23 gestational weeks placenta with numerous (+++) HGF containing cells of extravillous trophoblast and cytotrophoblast
 Mother 36 years of age, vaginal delivery of a boy of 650g. The boy died on the 3rd due to extreme prematurity. Study group G2 (normal pre-term)
 HGF IHC, X 250

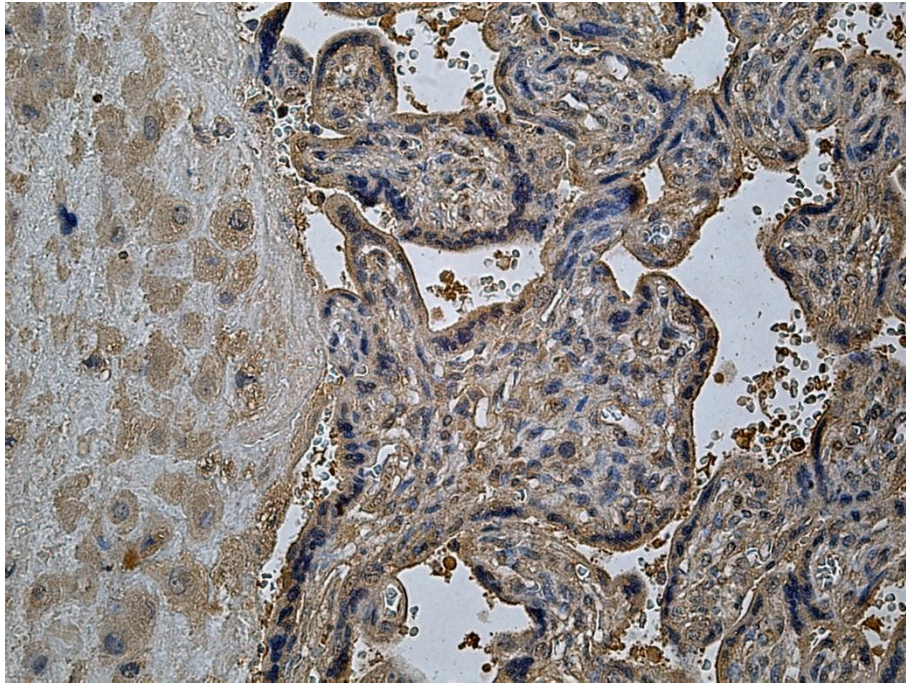


Figure 23. Maternal part and tertiary villi of a young placenta of 29 gestational weeks with abundance (++++) of HGF containing cells of extravillous trophoblast and cytotrophoblast

Mother 34 years of age mother, vaginal delivery of a boy of 1476g. The boy presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
HGF IHC, X 250

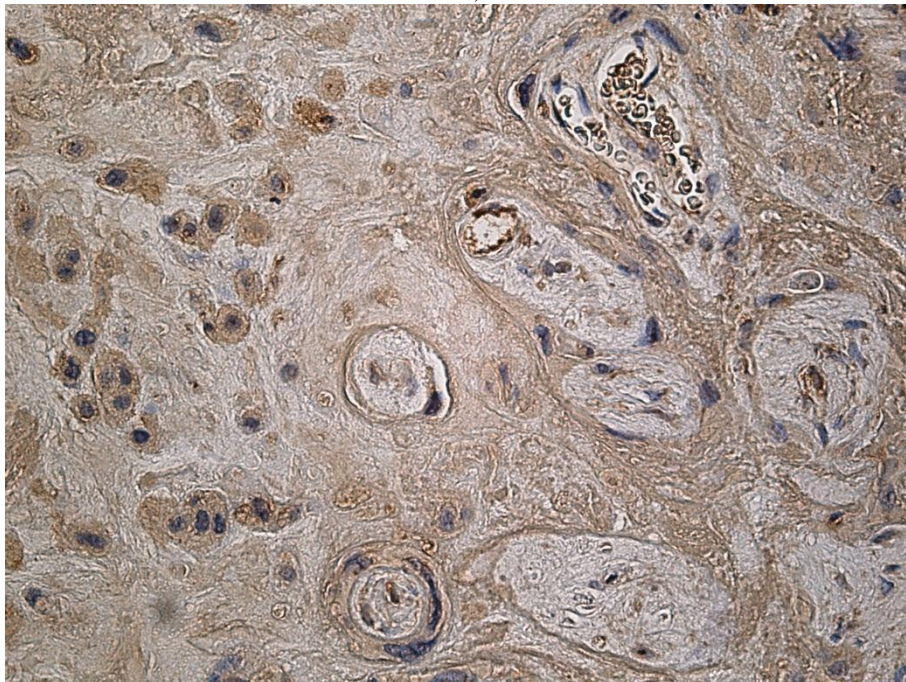


Figure 24. Maternal part of a 32 gestational week placenta with moderate amount (++) of HGF containing cells of extravillous trophoblast and Höfbauer

Note obliterated blood vessels with a zone of destruction (*). Mother 33 years of age, delivery by emergency Cesarean section, a boy of 1088g. The boy was small for the gestational age and presented a favorable clinical course for the gestation and birth weight. Study group G3 (distress)
HGF IHC, X 250

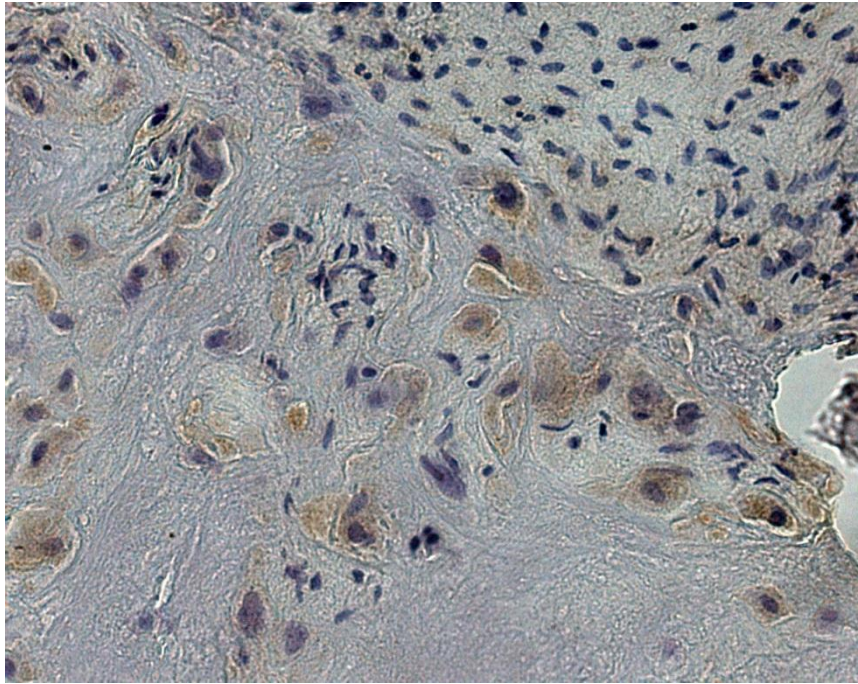


Figure 25. Maternal part of a 40 gestational week placenta with moderate amount (++) of FGfb containing Hofbauer cells

Mother 37 years of age, vaginal delivery of a boy of 4180g. The boy was healthy, discharged home in 7 days. Study group G1 (healthy term)

FGfb IHC, X 400.

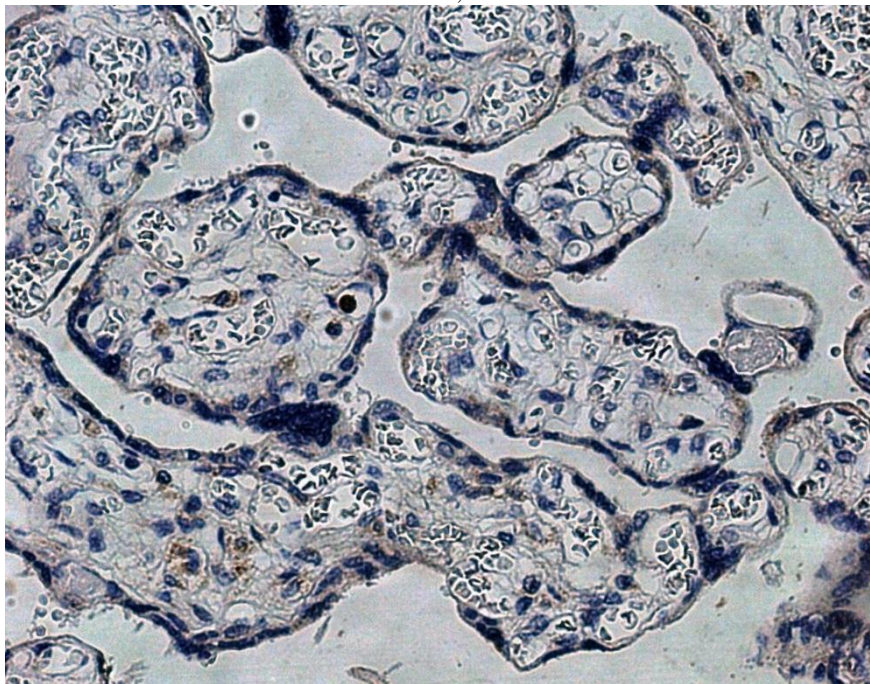


Figure 26. Edematous and plethoric tertiary villi of an old placenta of 38 gestational weeks with occasional (0/+) FGfb containing cytotrophoblast cells (G3).

Mother 39 years of age, vaginal delivery of a boy of 4510g. The boy was born in severe asphyxia, ventilation support was discontinued due to brain death. Study group G3 (distress)

FGfb IHC, X 250.

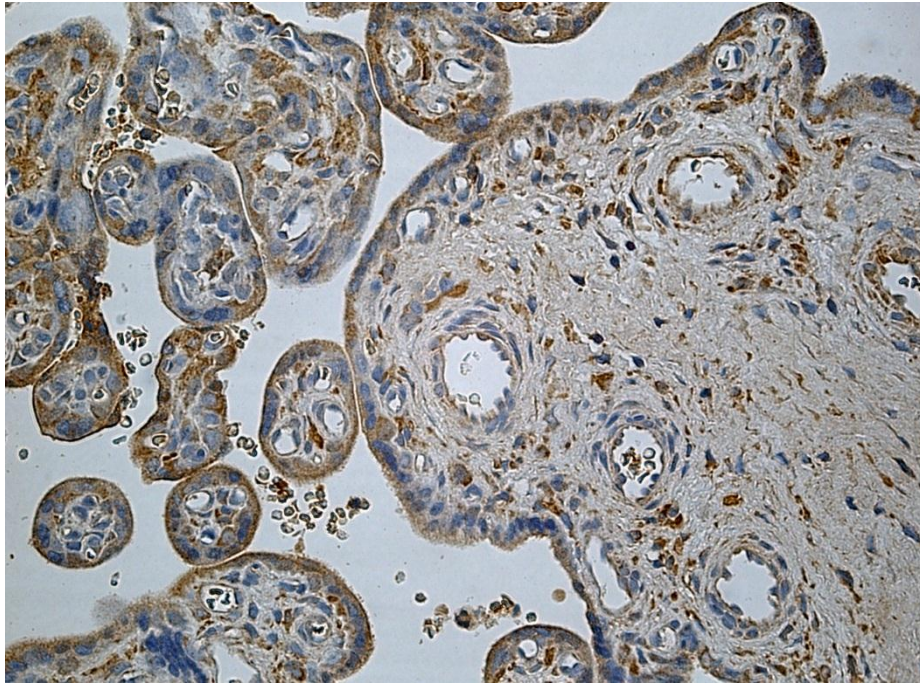


Figure 27. Tertiary villi of a transitional placenta of 40 gestational weeks with moderate amount (++) of FGFR1 containing cells of extraembryonic mesoderm, cytotrophoblast and syncytiotrophoblast

Mother 21 years of age, delivery by emergency CS of a boy of 3250g. The boy was healthy, discharged home in 7 days. Study group G1 (healthy term)

FGFR1 IHC, X 250.

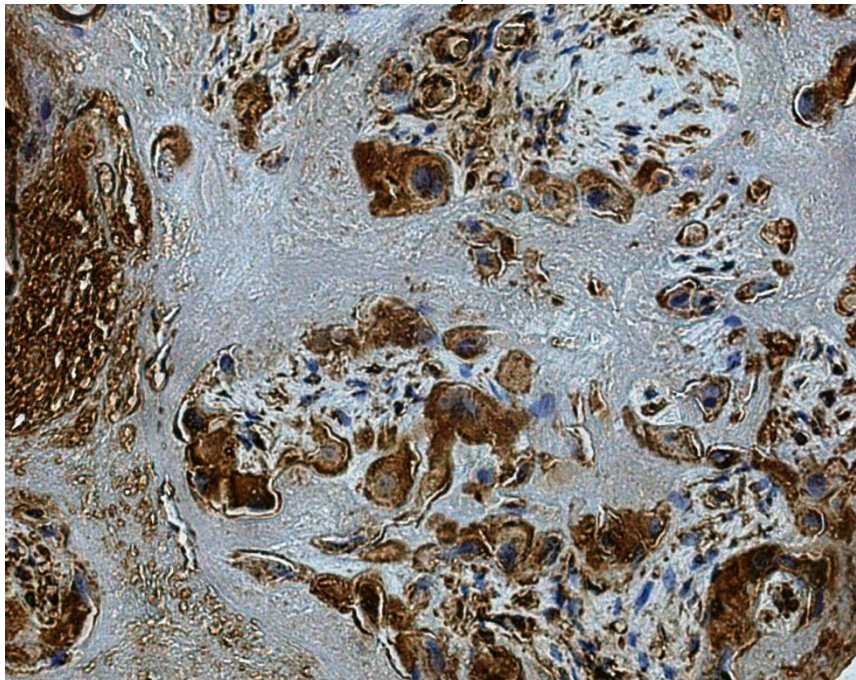


Figure 28. Maternal part of a 40 gestational weeks placenta with numerous (++++) FGFR1 containing Hofbauer cells

Note conglomerates of the Hofbauer cells encircling obliterated blood vessels. Mother 37 years of age, vaginal delivery of a boy of 4180g. The boy was healthy, discharged home in 7 days. Study group G1 (healthy term)

FGFR1 IHC, X 250

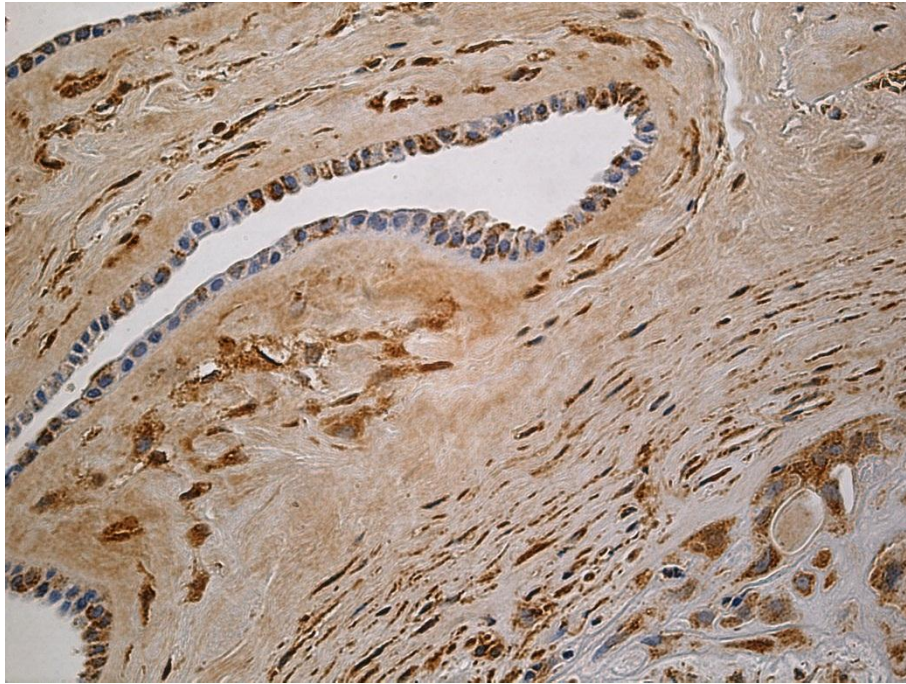


Figure 29. Fetal part of a 22 gestational week placenta with few (+) FGFR1 containing cells of Höfbauer and extraembryonic mesoderm in the chorionic plate
 Mother 20 years of age, vaginal delivery of a girl of 540g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
 FGFR1 IHC, X 250.

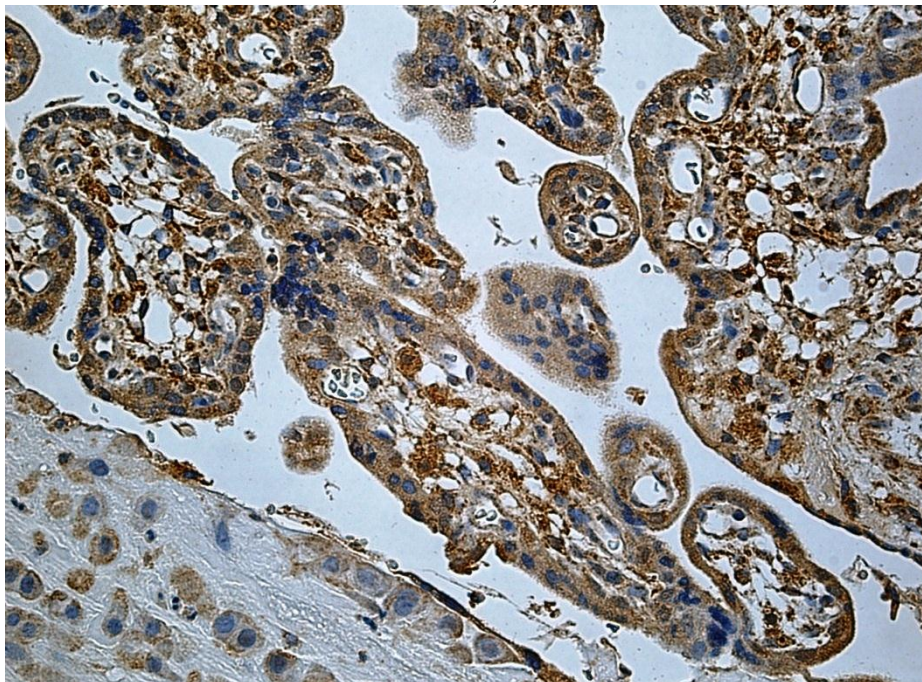


Figure 30. Maternal part and edematous tertiary villi of a transitional placenta of 24 gestational weeks with moderate amount (++) of FGFR1 containing extravillous trophoblast, cytotrophoblast and Höfbauer cells
 Mother 30 years of age, vaginal delivery of a girl of 720g. The girl presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)
 FGFR1 IHC, x 250.

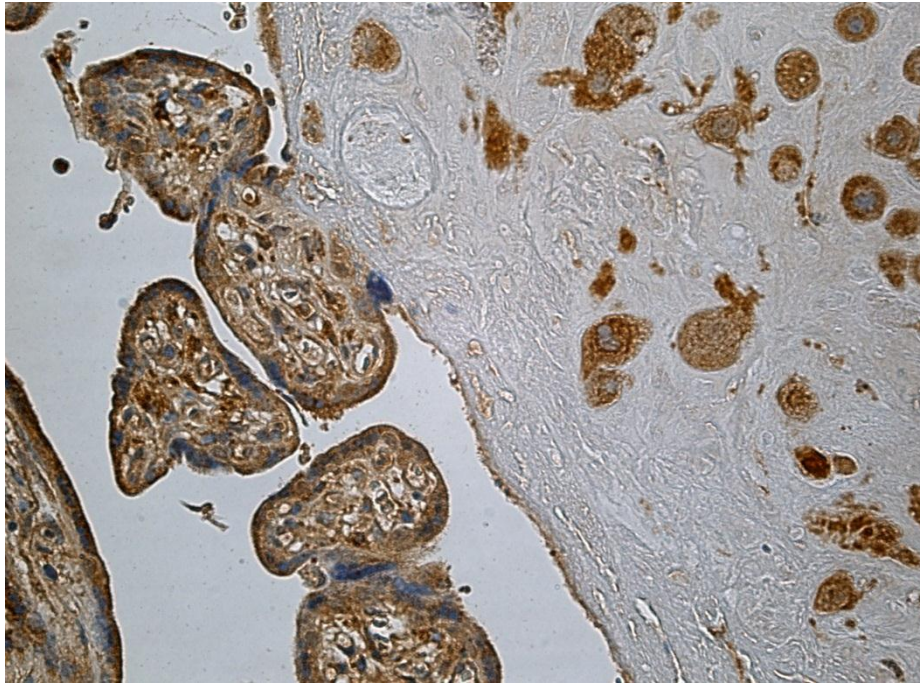


Figure 31. Maternal part and tertiary villi of a transitional placenta of 30 gestational weeks with moderate amount (++) of FGFR1 containing Höfbauer cells, extra-villous trophoblast and cytotrophoblast

Mother 32 years of age, vaginal delivery of a girl of 1580g. Mother had purulent bartolinitis at the time of delivery. The girl presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)

FGFR1 IHC x250.

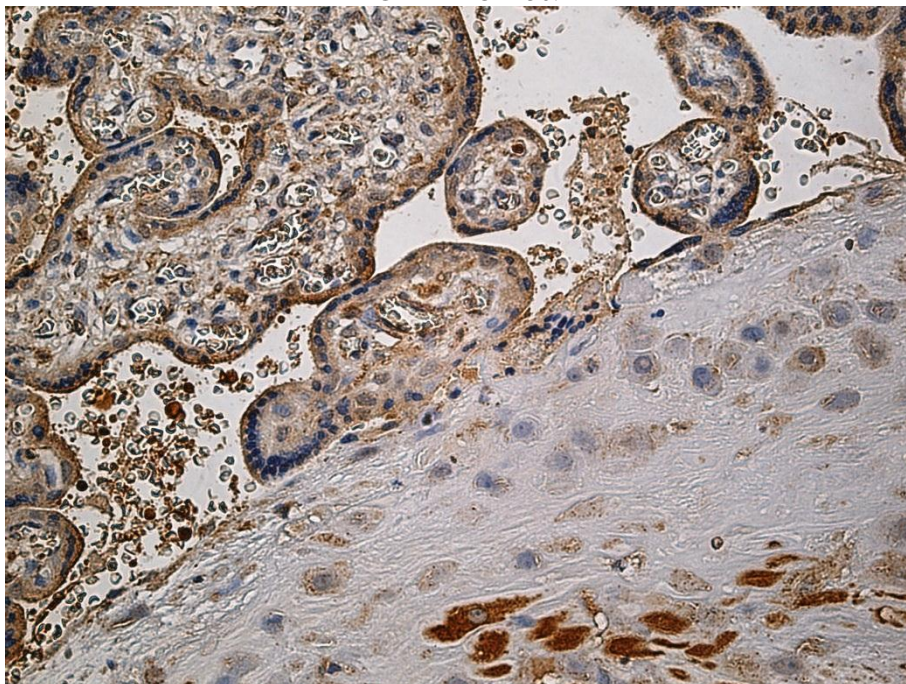


Figure 32. Maternal part and tertiary villi of a transitional placenta of 31 gestational week with moderate number (++) of FGFR1 containing Höfbauer cells, extravillous trophoblast, cytotrophoblast and syncytiotrophoblast

Note strong FGFR1 immunoreactivity of Hofbauer cells. Mother 28 years of age, delivery by emergency Cesarean section, a boy of 1888g. The boy developed early neonatal sepsis; causative agent was not identified. Study group G2 (normal pre-term)

FGFR1 IHC, X 250

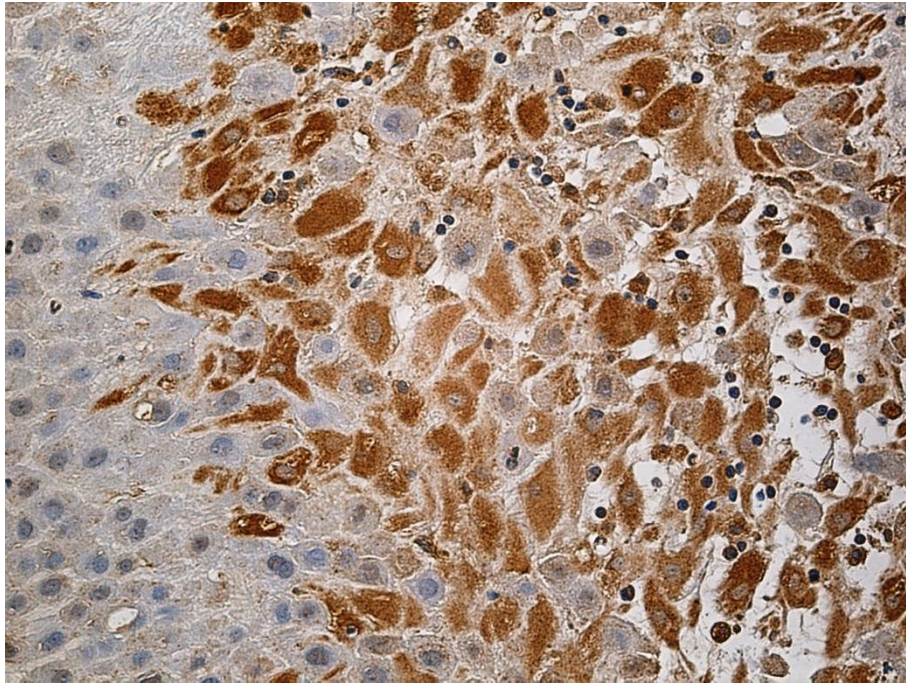


Figure 33. Maternal part of a 31 gestational week placenta with numerous (+++) FGFR1 containing Höfbauer cells

Mother 28 years of age, delivery by emergency Cesarean section, a boy of 1888g. The boy developed early neonatal sepsis; causative agent was not identified. Study group G2 (normal pre-term)
FGFR1 IHC, X 250.

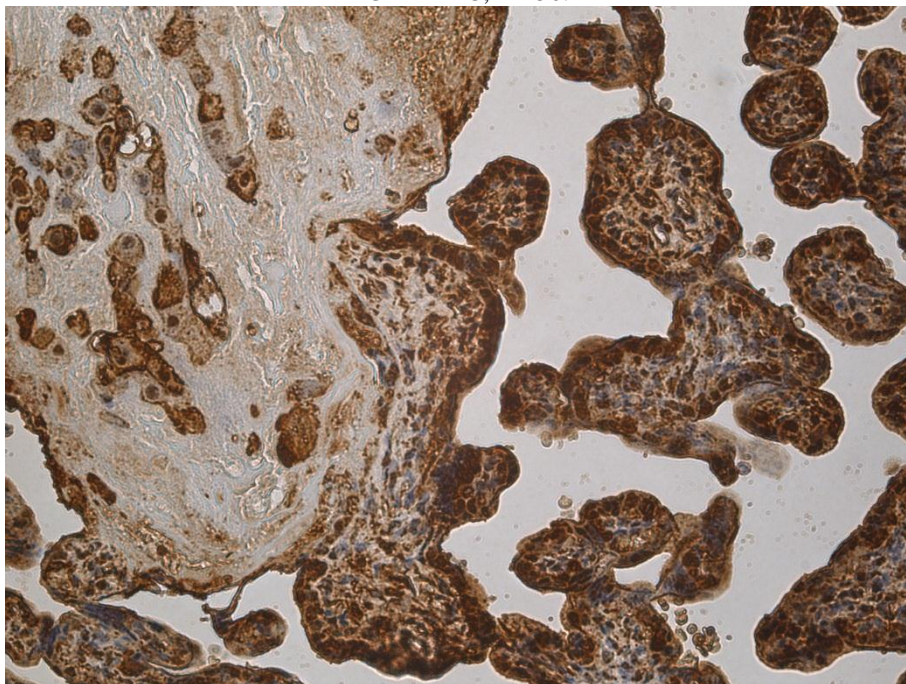


Figure 34. Maternal part and tertiary villi of a young placenta of 28 gestational weeks with abundance (++++ of FGFR1 containing cells of extravillous trophoblast, Höfbauer, cytotrophoblast and syncytiotrophoblast

Mother 20 years of age, vaginal delivery of a girl of 1190g. The girl developed early neonatal sepsis; causative agent was not identified. Study group G2 (normal pre-term)
FGFR1 IHC, X 250.

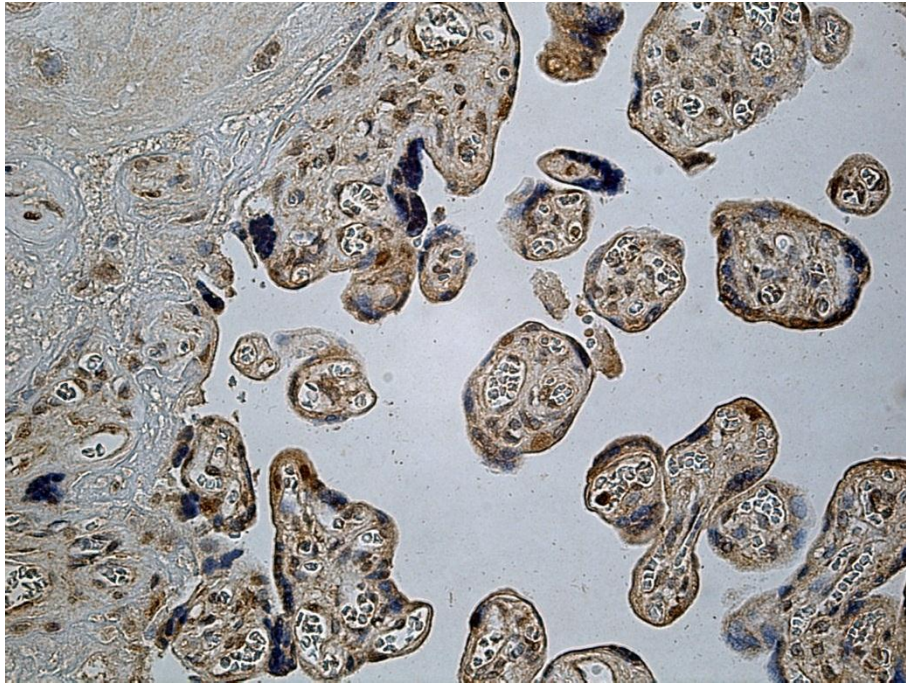


Figure 35. Maternal part with an anchoring villus and plethoric tertiary villi of an old placenta of 39 gestational weeks with few (+) IL-1 containing Hofbauer, extraembryonic mesoderm and cytotrophoblast cells

Note obliterated blood vessels in the maternal part. Mother 35 years of age, delivery by emergency CS of a girl of 3810g. The girl was healthy, discharged home. Study group G1 (healthy term)

IL-1 IHC, X 250.

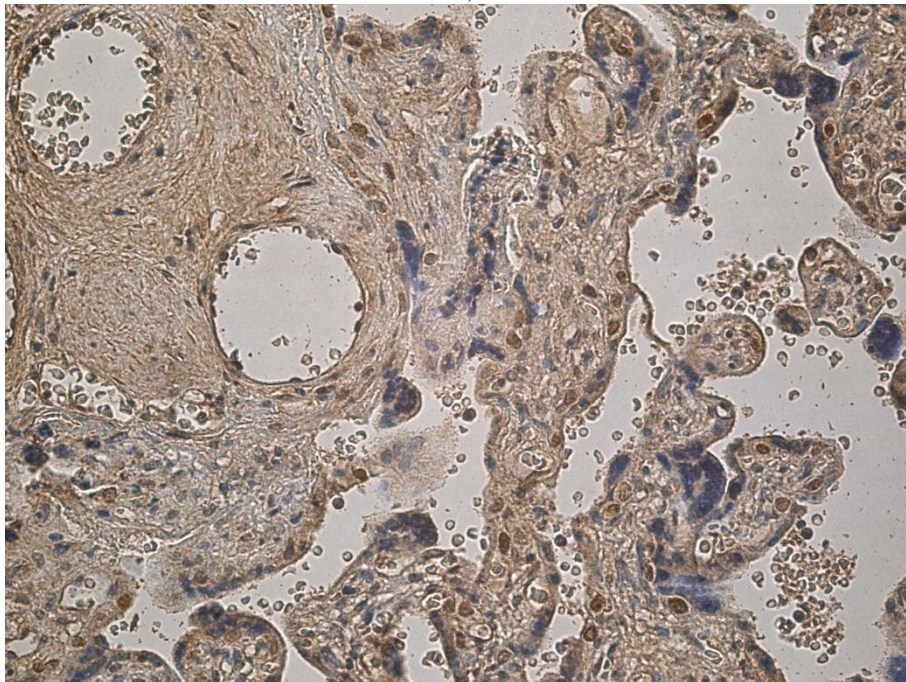


Figure 36. Maternal part and tertiary villi of an old placenta of 39 gestational weeks with moderate amount (++) of IL-1 containing inflammatory and cytotrophoblast cells
Mother 32 years of age, vaginal delivery of a boy of 4000g. The boy was healthy, discharged home in 7 days. Study group G1 (healthy term)

IL-1 IHC, X 250.

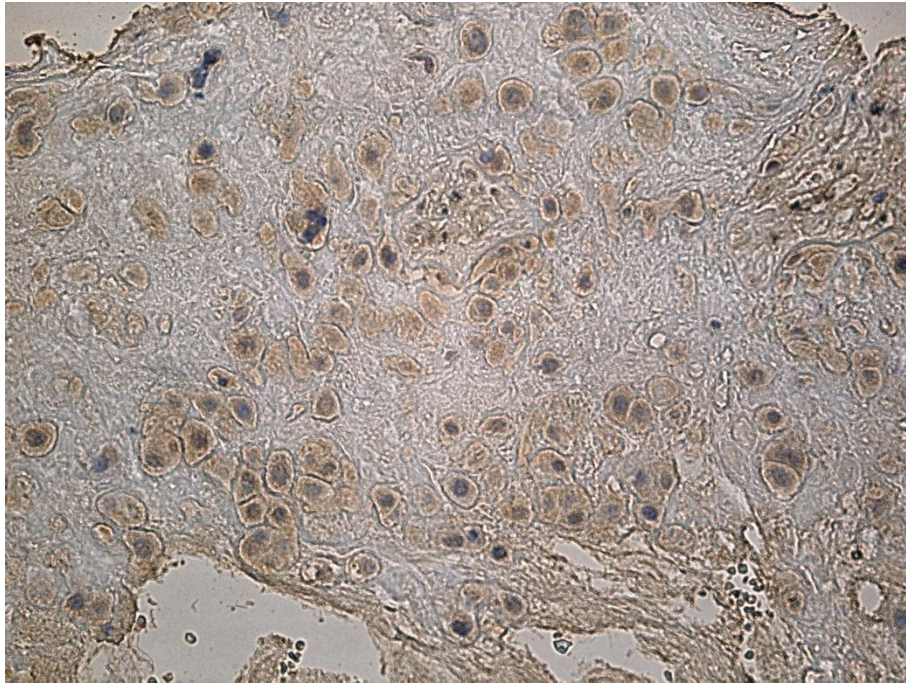


Figure 37. Maternal part of a 37 gestational week placenta with numerous (+++) IL-1 containing extravillous trophoblast cells (G1).

Mother 42 years of age, delivery by Cesarean section, a girl of 3200g. The girl was healthy, discharged home in 7 days. Study group G1 (healthy term)

IL-1 IHC X 250.

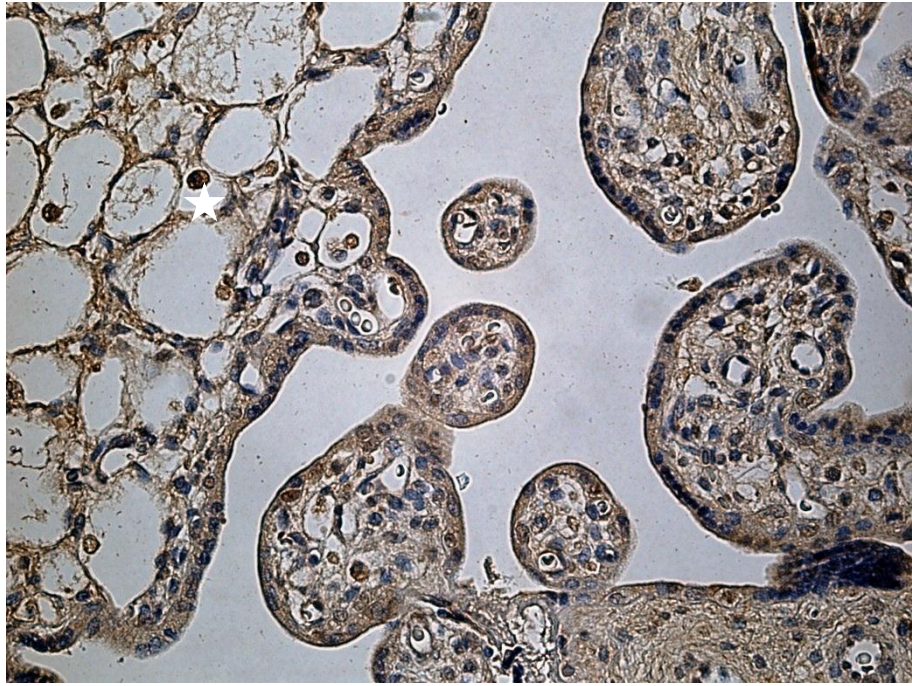


Figure 38. Strongly edematous tertiary villi of a young placenta of 22 gestational weeks with occasional *(0/+) IL-1 containing inflammatory cells

Mother 20 years of age, vaginal delivery of a girl of 540g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)

IL-1 IHC, X 250.

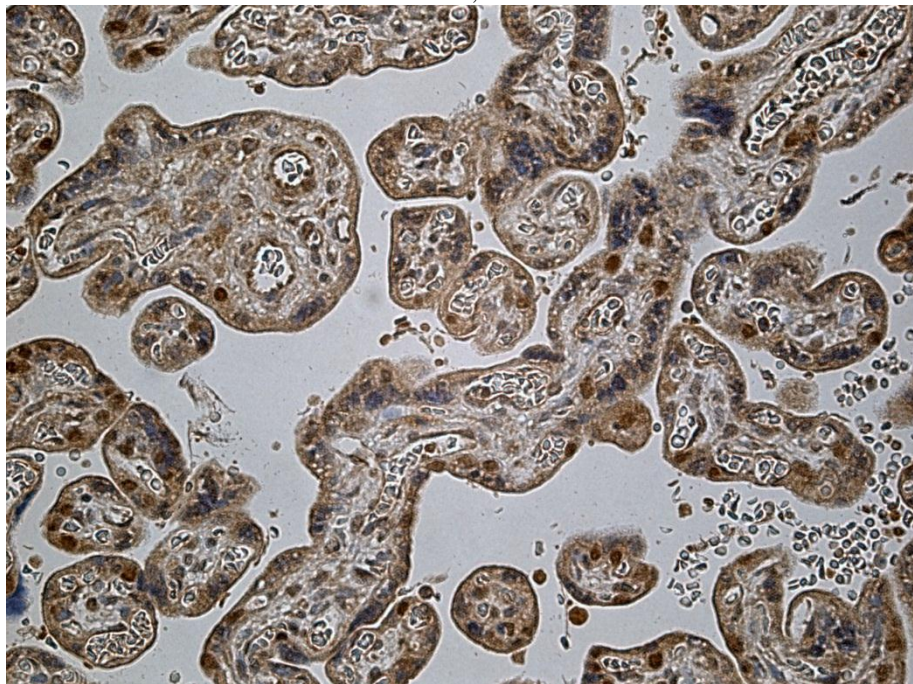


Figure 39. Tertiary villi of a transitional 31 gestational week placenta with numerous (++++) IL-1 containing inflammatory cells and cytotrophoblast

Mother 34 years of age, delivery by emergency CS of a girl of 1780g. The girl presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)

IL-1 IHC, X 250.

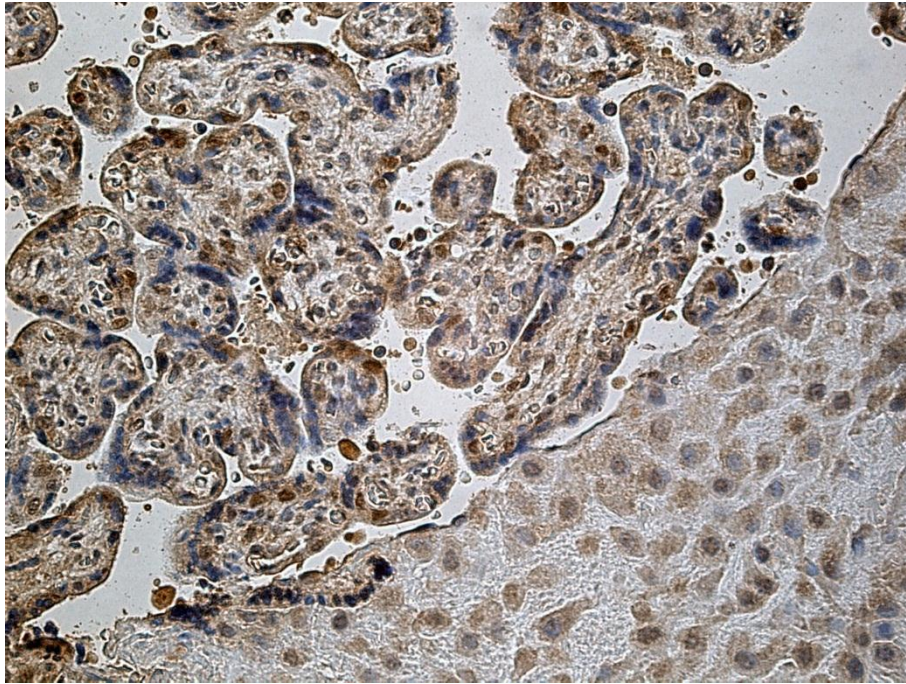


Figure 40. Maternal part and tertiary villi of a transitional 31 gestational week placenta with numerous (+++) IL-1 containing inflammatory cells, Hofbauer cells, extravillous trophoblast and cytotrophoblast

Mother 34 years of age, delivery by emergency CS of a girl of 1780g. The girl presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)

IL-1 IHC, X 250.

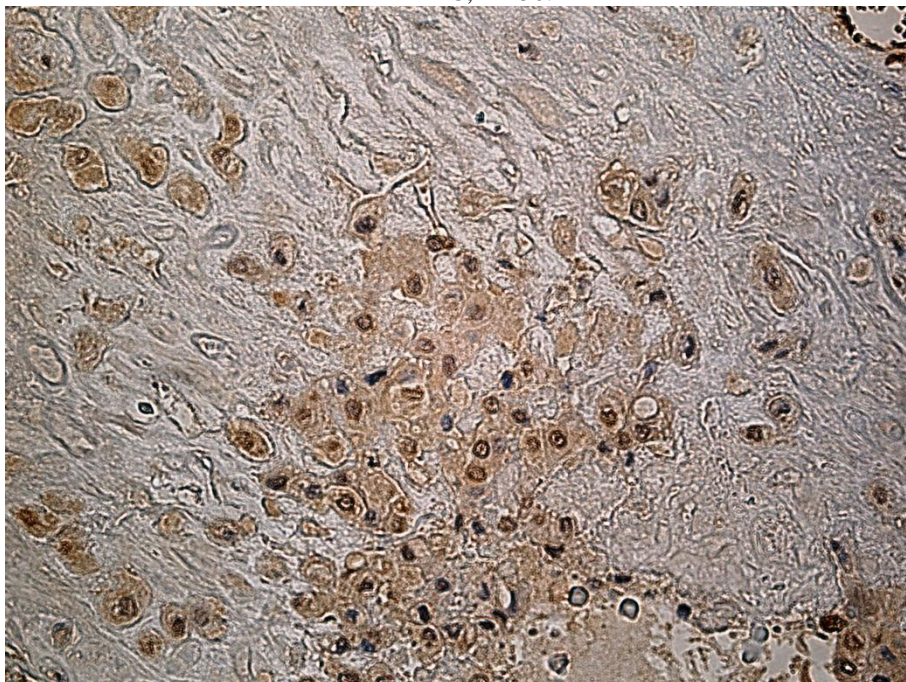


Figure 41. Maternal part of a 40 gestational week placenta with moderate amount (++) of IL-1 containing Hofbauer cells and extravillous trophoblast

Mother 26 years of age, vaginal delivery of a boy of 4330g. The boy developed early neonatal sepsis; causative agent was not identified. Study group G3 (distress)

IL-1 IHC, X 250.

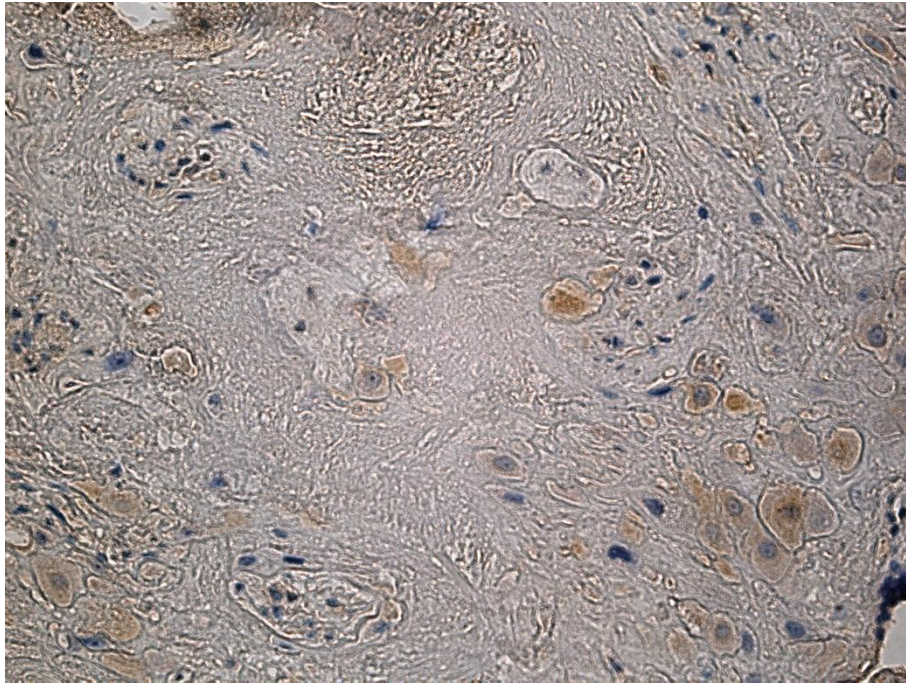


Figure 42. Maternal part of a 37 gestational week placenta with few (+) TNF α containing Hofbauer cells

Note obliterated blood vessels. Mother 29 years of age, vaginal delivery of a girl of 3020g. The girl was healthy, discharged home in 7 days. Study group G1 (healthy term)
TNF α IHC, X 250.

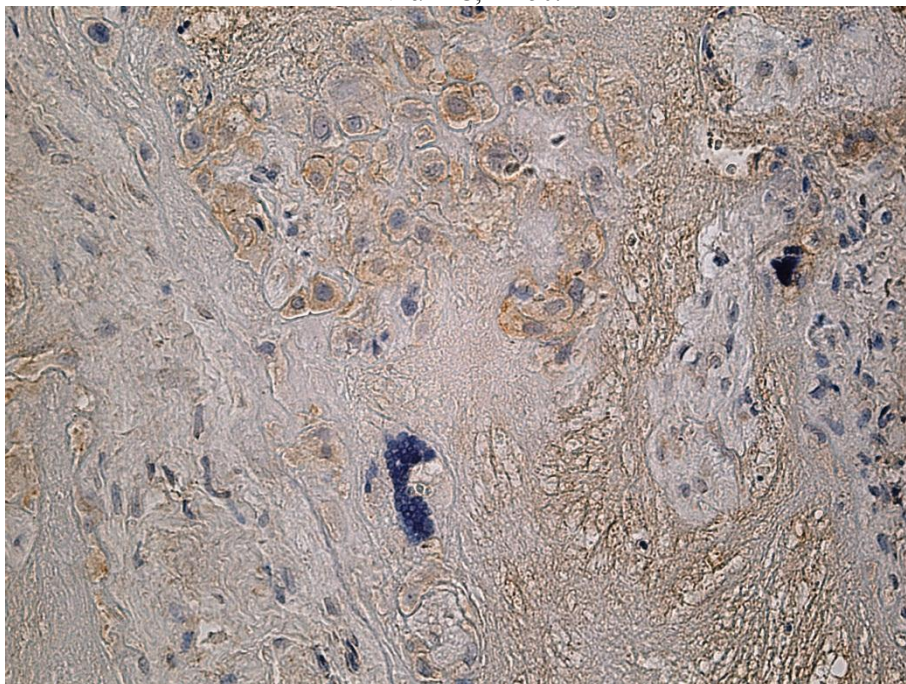


Figure 43. Maternal part of a 40 gestational week placenta with moderate number (++) of TNF α containing Hofbauer cells

Mother 23 years of age, delivery by emergency Cesarean section, a boy of 3250g. The boy was healthy, discharged home in 7 days. Study group G1 (healthy term)
TNF α IHC, X 250.

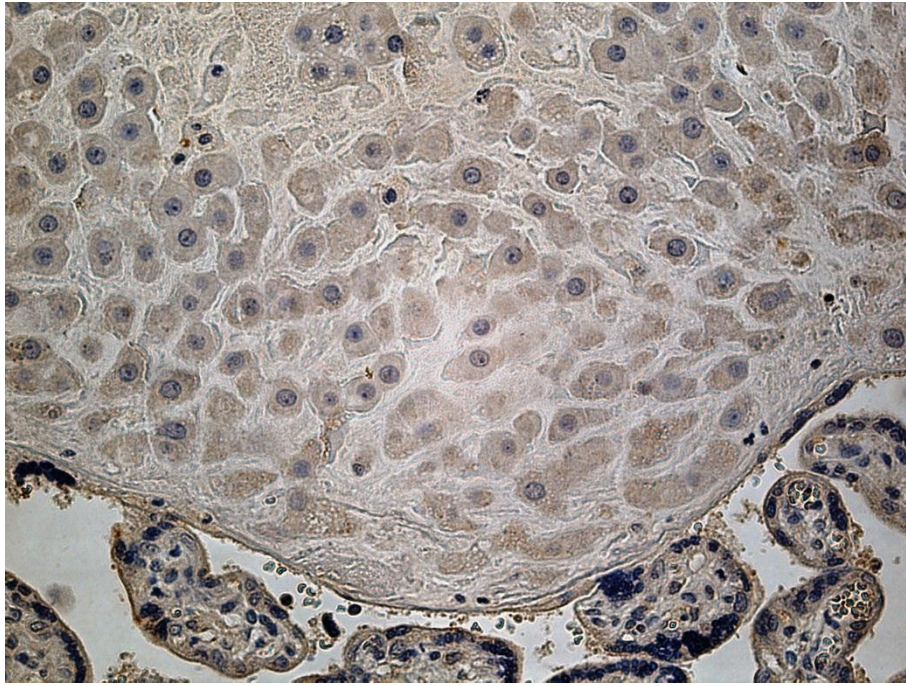


Figure 44. Maternal part and tertiary villi of a transitional placenta of 28 gestational weeks with numerous (+++) TNF α containing cells of Höfbauer and extravillous trophoblast

Mother 34 years of age, vaginal delivery of a girl of 1290g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
TNF α IHC, X 400.

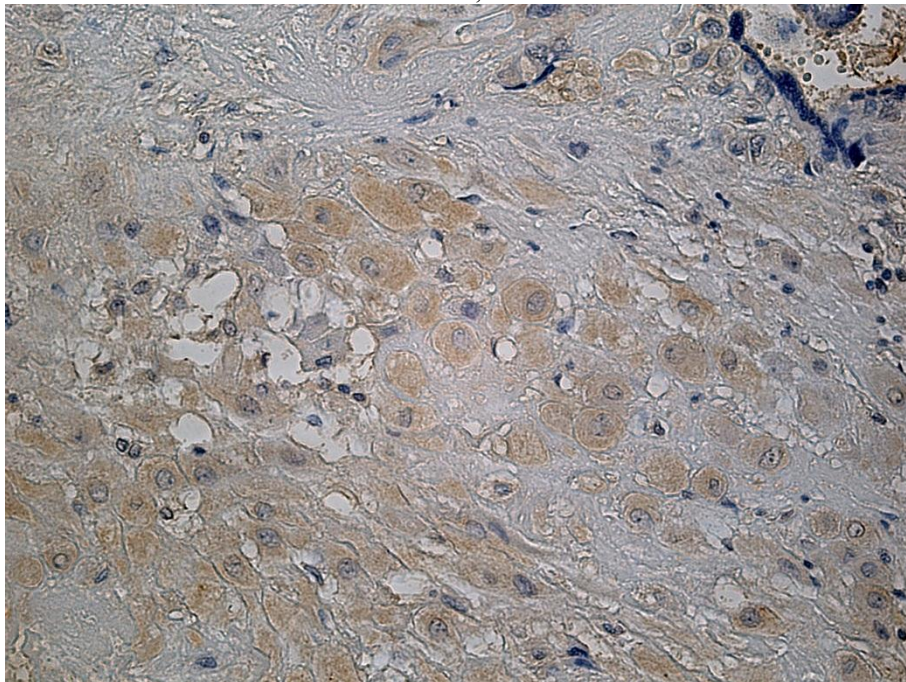


Figure 45. Maternal part of a 34 gestational week placenta with numerous (+++) TNF α containing extravillous trophoblast and Höfbauer cells

Mother 29 years of age, vaginal delivery of a girl of 2390g. The girl presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)
TNF α IHC, x 250.

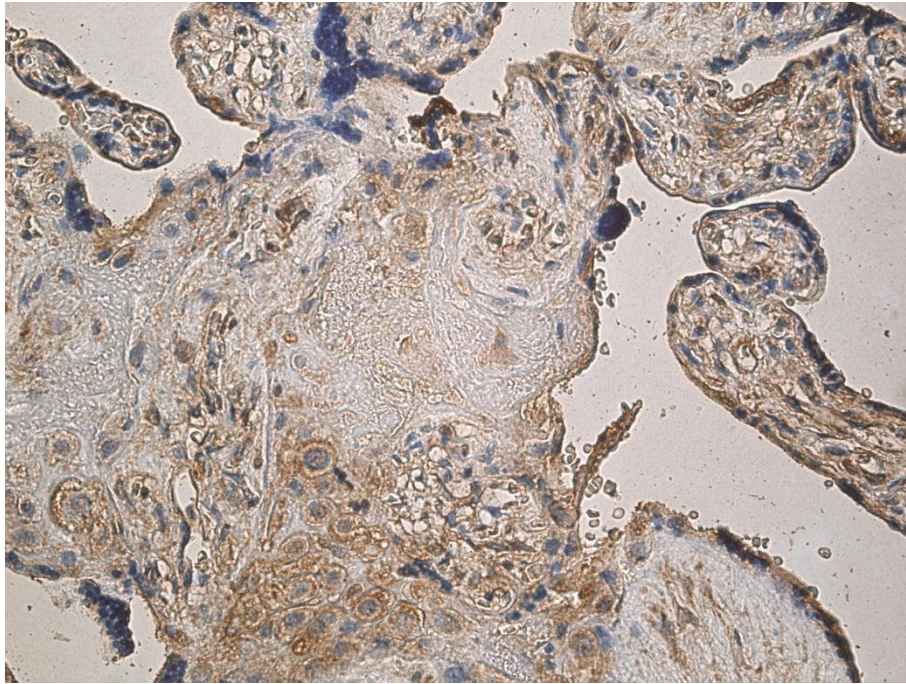


Figure 46. Maternal part and tertiary villi of a transitional placenta of 40 gestational weeks with moderate (++) amount of IL-10 containing Hofbauer cells, extra-villous trophoblast, cytotrophoblast and syncytiotrophoblast

Mother 21 years of age, delivery by emergency CS of a boy of 3250g. The boy was healthy, discharged home. Study group G1 (healthy term)
IL-10 IHC, X 400.

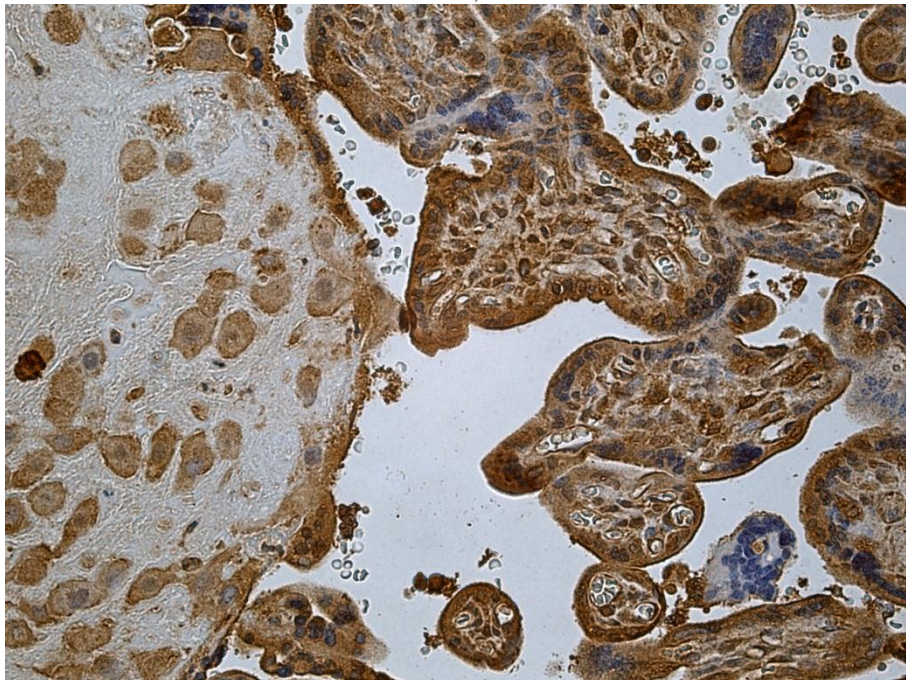


Figure 47. Maternal part and tertiary villi of a young placenta of 22 gestational weeks with abundance (+++++) of IL-10 containing extravillous trophoblast, cytotrophoblast and syncytiotrophoblast cells

Mother 20 years of age, vaginal delivery of a girl of 540g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
IL-10 IHC, X 250.

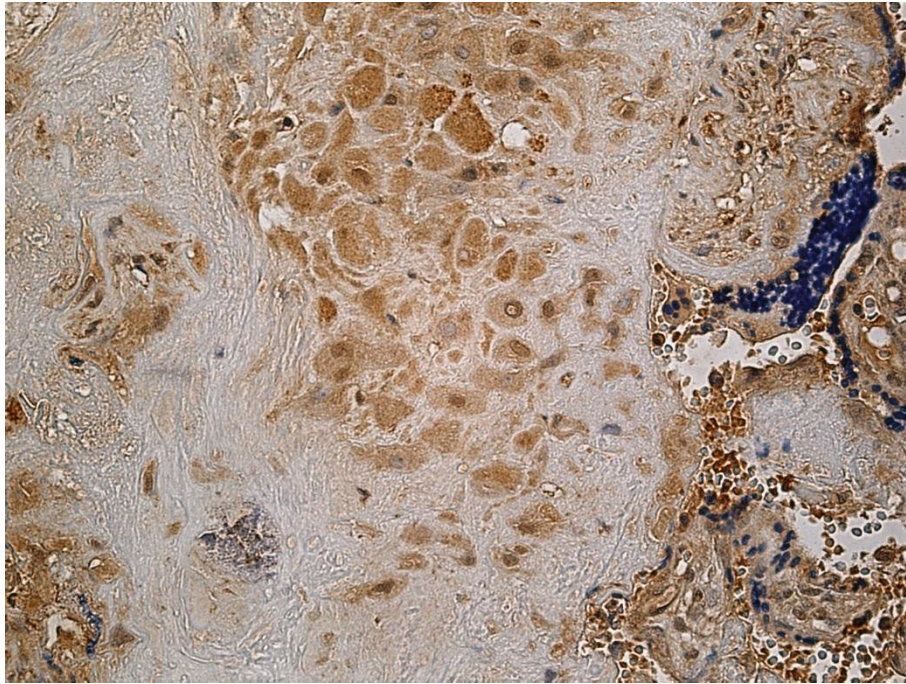


Figure 48. Maternal part of a 34 gestational week placenta with moderate number (++) of IL-10 containing Hofbauer cells, extravillous trophoblast, cytotrophoblast and syncytiotrophoblast

Mother 29 years of age, vaginal delivery of a girl of 2390g. The girl presented appropriate clinical course for the gestational age. Study group G2 (normal pre-term)

IL-10 IHC, X 250.

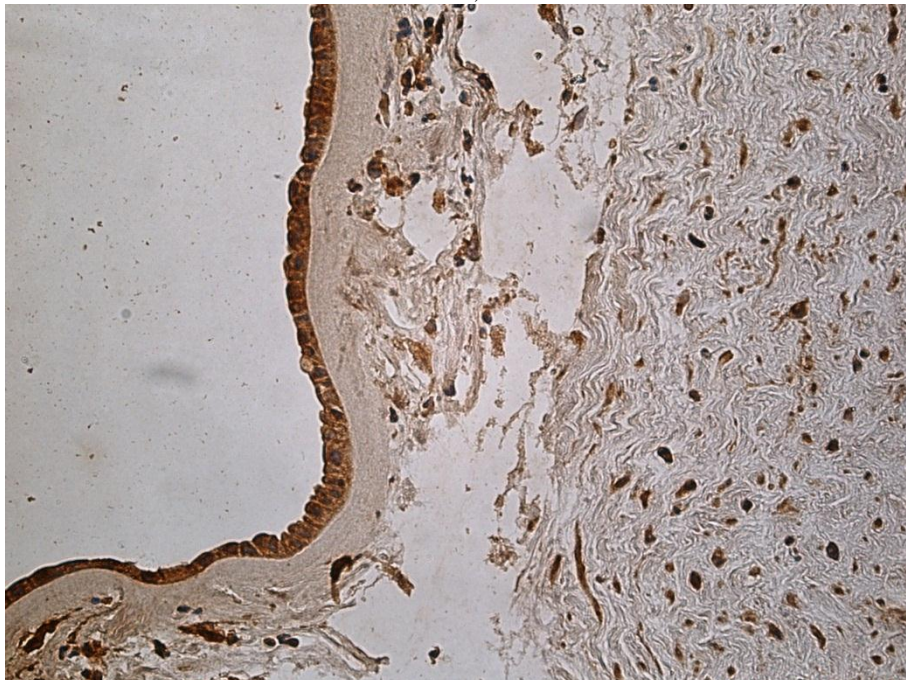


Figure 49. Fetal part of a 23 gestational week placenta with numerous (+++) IL-10 containing cells of amniotic epithelium and extraembryonic mesoderm

Mother 36 years of age, vaginal delivery of a boy of 650g. The boy died on the 3rd day of life due to extreme prematurity. Study group G2 (normal pre-term)

IL-10 IHC, X 250.

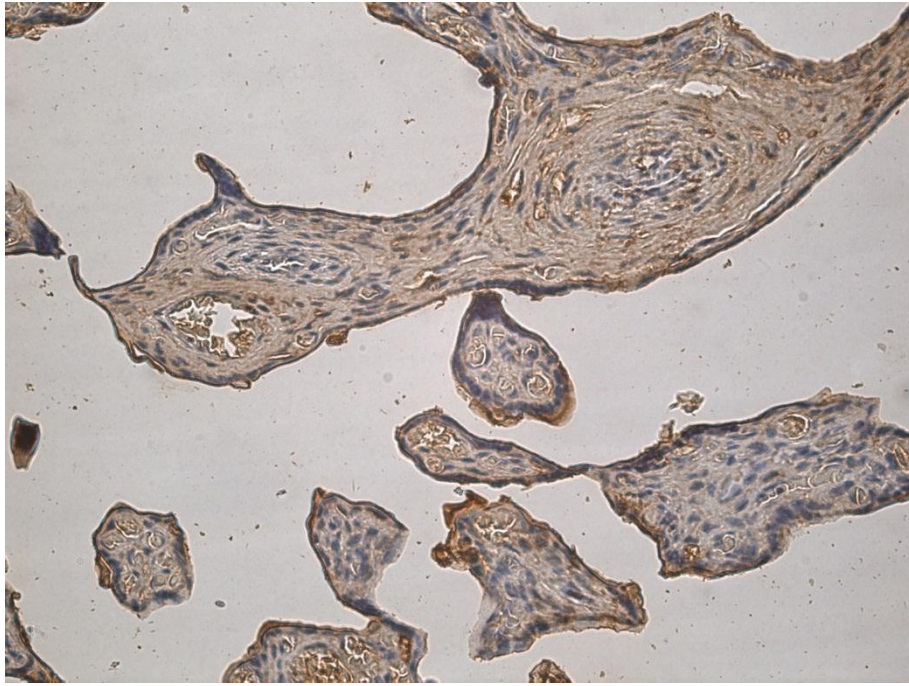


Figure 50. Tertiary villi of an old 38 gestational week placenta with few (+) IL-10 containing cytotrophoblast cells

Mother 31 years of age, vaginal delivery of a stillborn girl of 2786g. Study group G3 (distress)
IL-10 IHC, X 250.

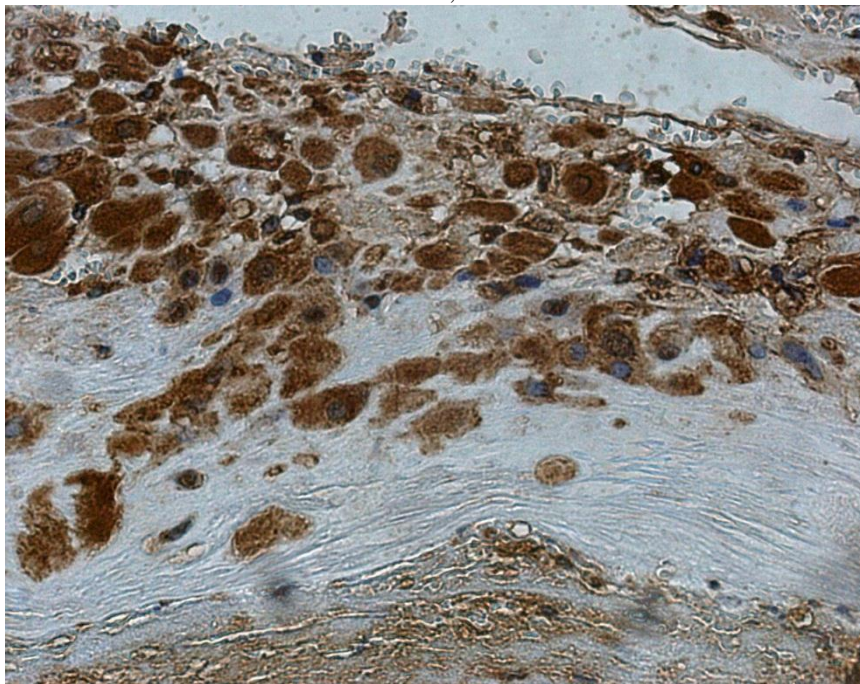


Figure 51. Maternal part of a 40 gestational week placenta with abundance (++++ of IL-10 containing Hofbauer cells and extravillous trophoblast

Mother 25 years of age, vaginal delivery of a boy of 4330g. The boy developed early neonatal sepsis, the causative agent was not identified. Study group G3 (distress)
IL-10 IHC, X 400.

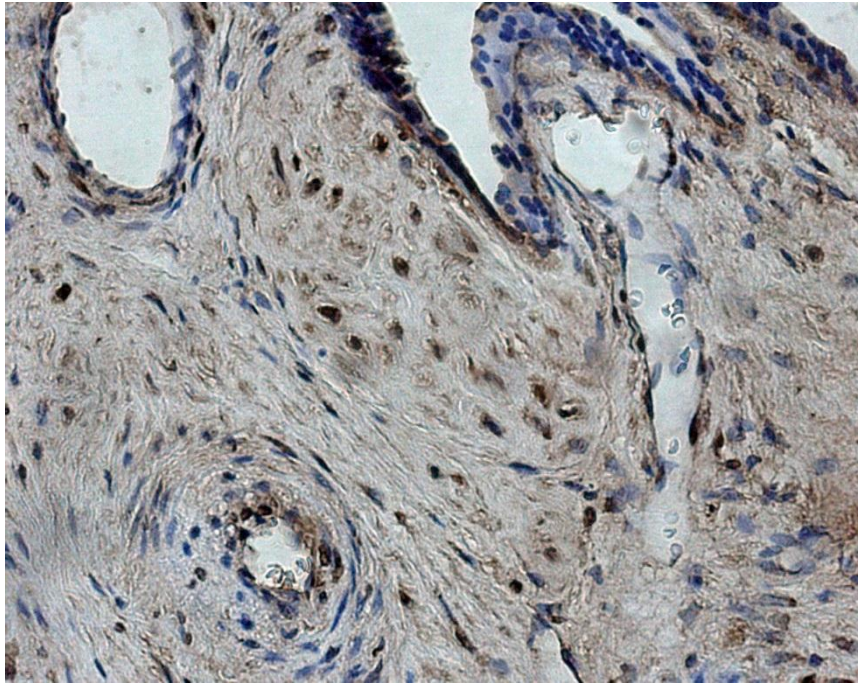


Figure 52. A large tertiary villi of a 38 gestational week placenta with 1.64 ± 1.57 apoptotic cells of cytotrophoblast, syncytiotrophoblast and extraembryonic mesoderm in a visual field

27 years of age mother, delivery by elective Cesarean section; a boy of 4290g. The boy presented uncomplicated clinical course and was discharged in 7 days. Study group G1 (healthy term)
TUNEL, x 250.

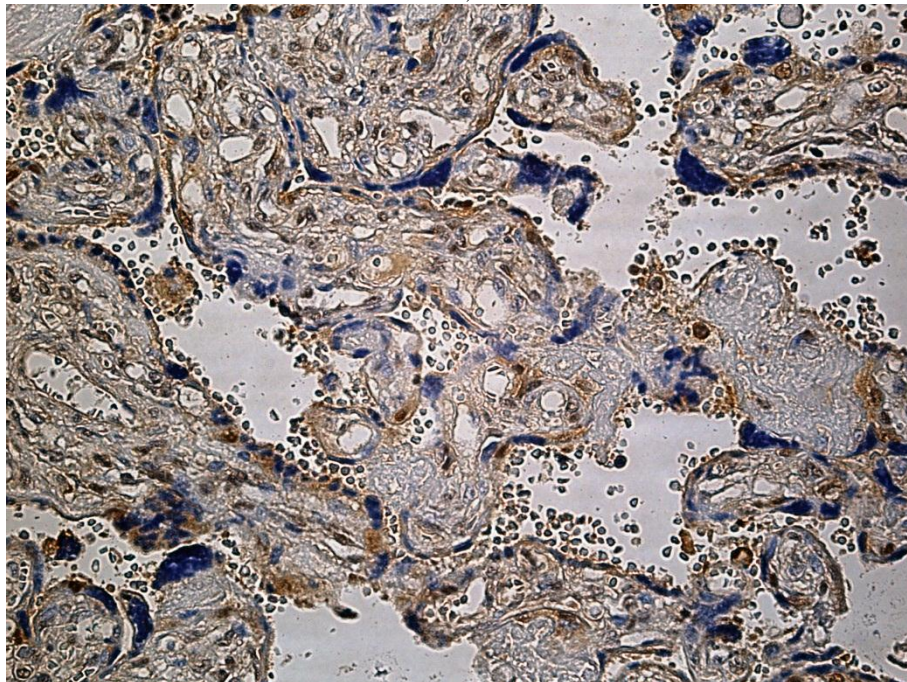


Figure 53. Tertiary villi of a transitional placenta of 34 gestational weeks with 8.0 ± 3.32 apoptotic cells of cytotrophoblast and syncytiotrophoblast in a visual field

Note large number of sinusoid capillaries in the villi. Mother 29 years of age, vaginal delivery of a girl of 2390g. The girl presented appropriate clinical course for the gestational age. Study group G2 (normal pre-term)
Caspase IHC, X 250.

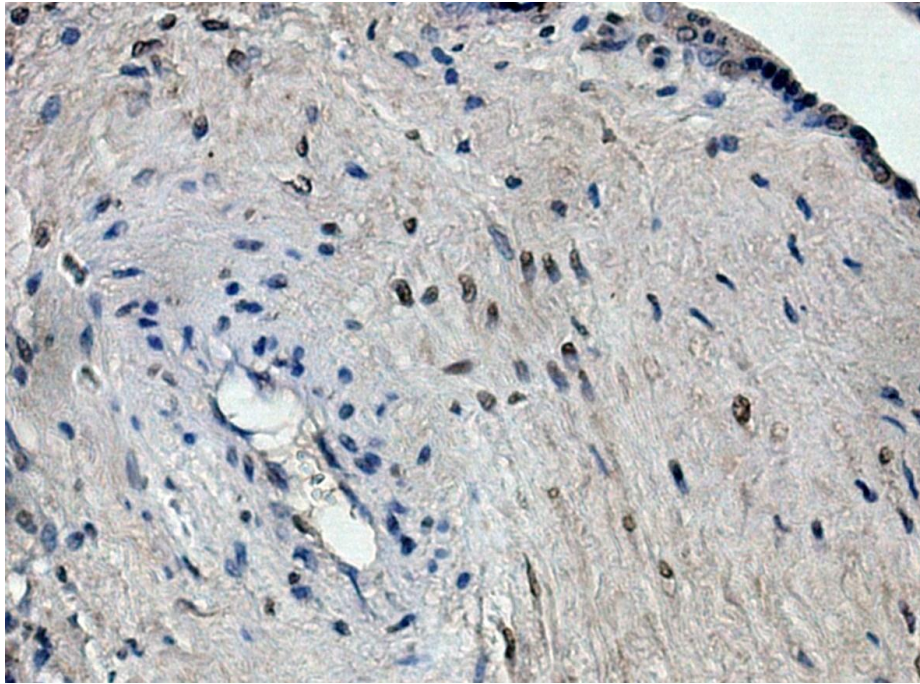


Figure 54. Tertiary villi of a 28 gestational week placenta with 9.09 ± 4.93 apoptotic cells of extraembryonic mesoderm and cytotrophoblast in a visual field

Mother 34 years of age, vaginal delivery of a girl of 1290g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
TUNEL, X 250.

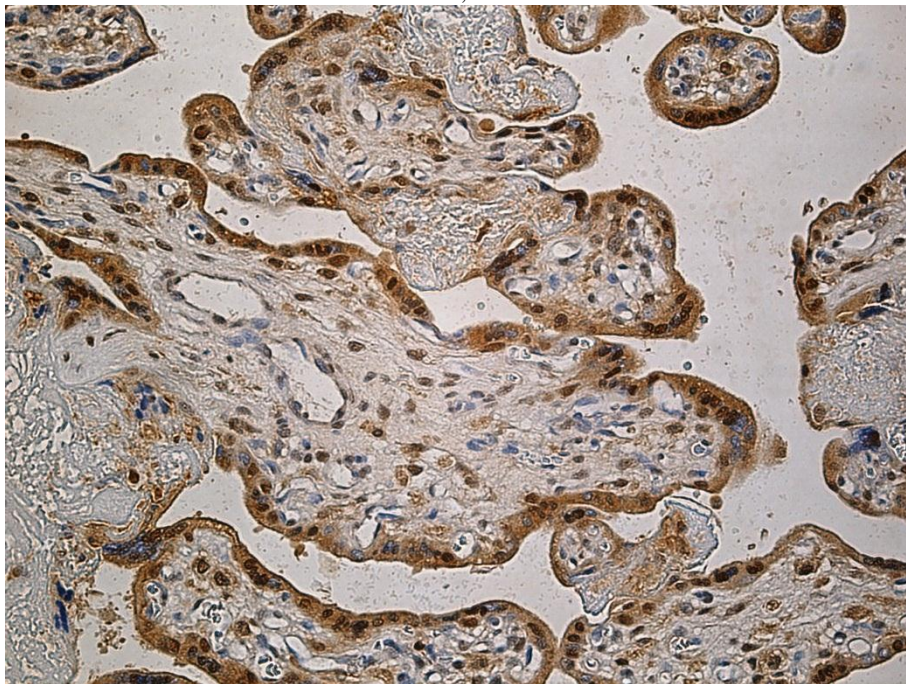


Figure 55. Tertiary villi of a transitory placenta of 30 gestational weeks with 57.91 ± 7.26 apoptotic cells of cytotrophoblast and extraembryonic mesoderm in a visual field

Mother 36 years of age, vaginal delivery of a boy of 1710g. The boy presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)
Caspase IHC, X 400.

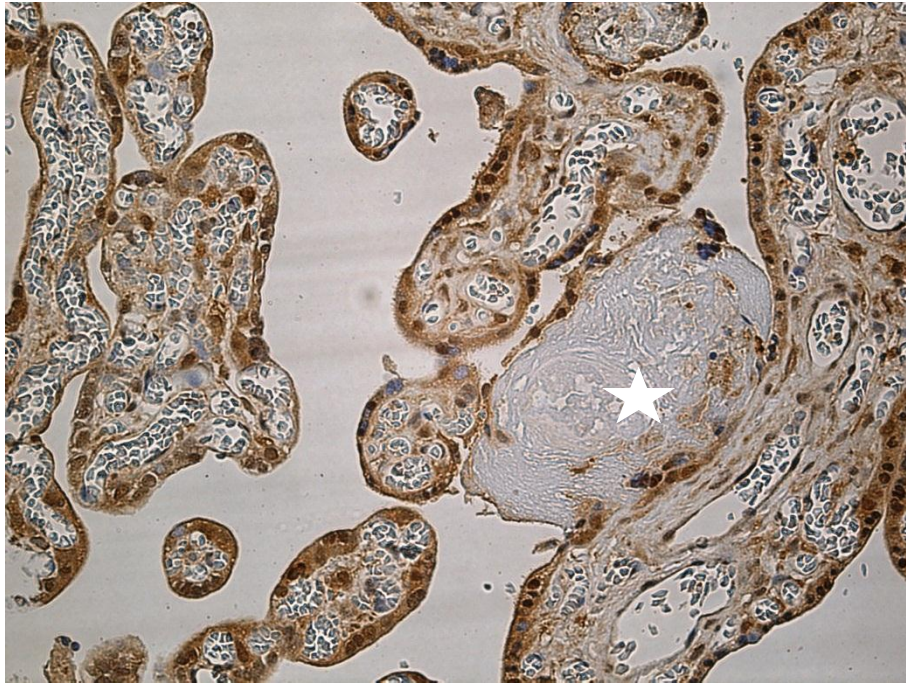


Figure 56. Tertiary villi of a transitory placenta of 32 gestational weeks with 75.91 ± 14.42 apoptotic cells of cytotrophoblast and extraembryonic mesoderm in a visual field. Note large number of sinusoid capillaries and a large zone of infarction (*)
 Mother 34 years of age, delivery by emergency Cesarean section; a girl of 1780g. The girl presented favorable clinical course for the gestational age. Study group G2 (normal pre-term)
 Caspase IHC, X 250.

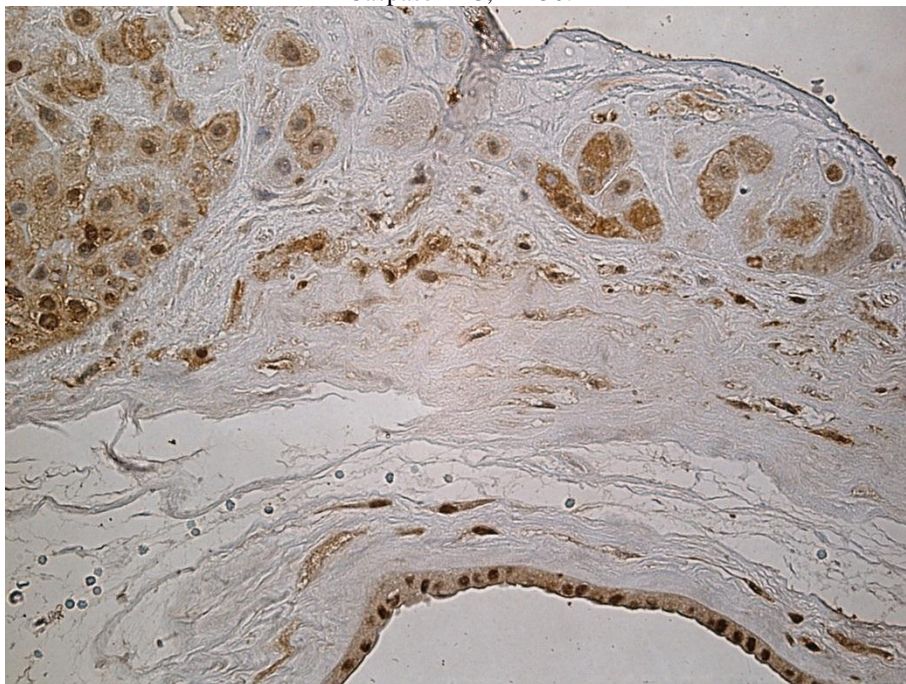


Figure 57. Fetal part of a 32 gestational week placenta with 75.91 ± 14.42 apoptotic cells in a visual field
 Note apoptotic cells of amniotic epithelium and extravillous trophoblast in the chorionic plate. Mother 34 years of age, delivery by emergency Cesarean section; a girl of 1780g. The girl presented favorable clinical course for the gestational age. Study group G2 (normal pre-term)
 Caspase IHC, X 250.

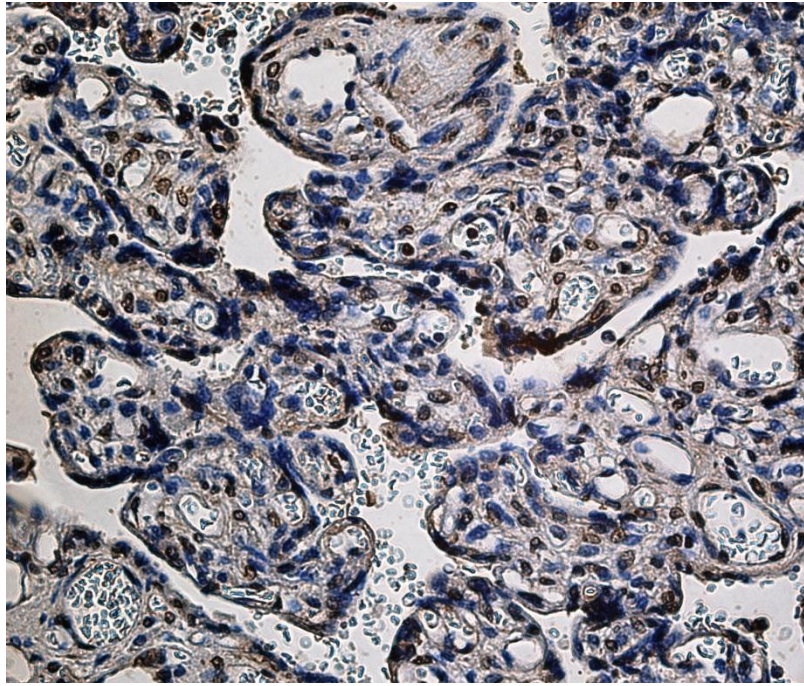


Figure 58. Tertiary villi of a transitional placenta of 40 gestational weeks with 43.91 ± 6.76 apoptotic cells of cytotrophoblast in a visual field

Mother 25 years of age, vaginal delivery of a boy of 4330g. The boy developed early neonatal sepsis with pneumonia and meningitis, the causative agent was not identified. Study group G3 (distress) TUNEL, x 250.

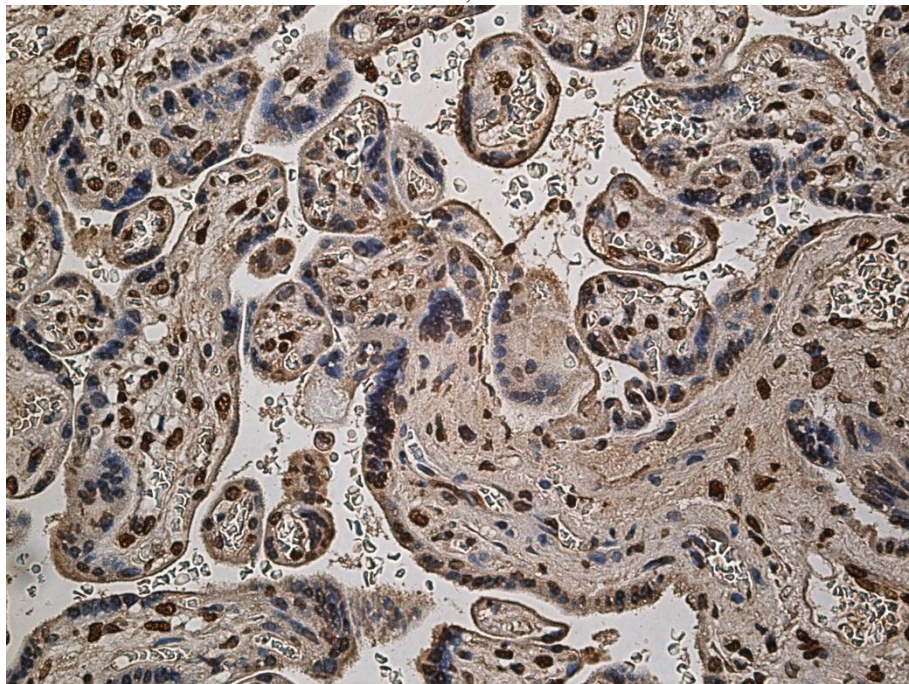


Figure 59. Tertiary villi of a transitional placenta of 35 gestational weeks with 71.91 ± 10.32 apoptotic cells of extraembryonic mesoderm, cytotrophoblast and syncytiotrophoblast in a visual field

Note plethora of the villi. Mother 30 years of age with preeclampsia, delivery by emergency Cesarean section; a boy of 1920g was small for the gestational age. The boy presented favorable clinical course for the gestation and birth weight and was discharged home in 7 days. Study group G3 (distress) TUNEL, X 250.

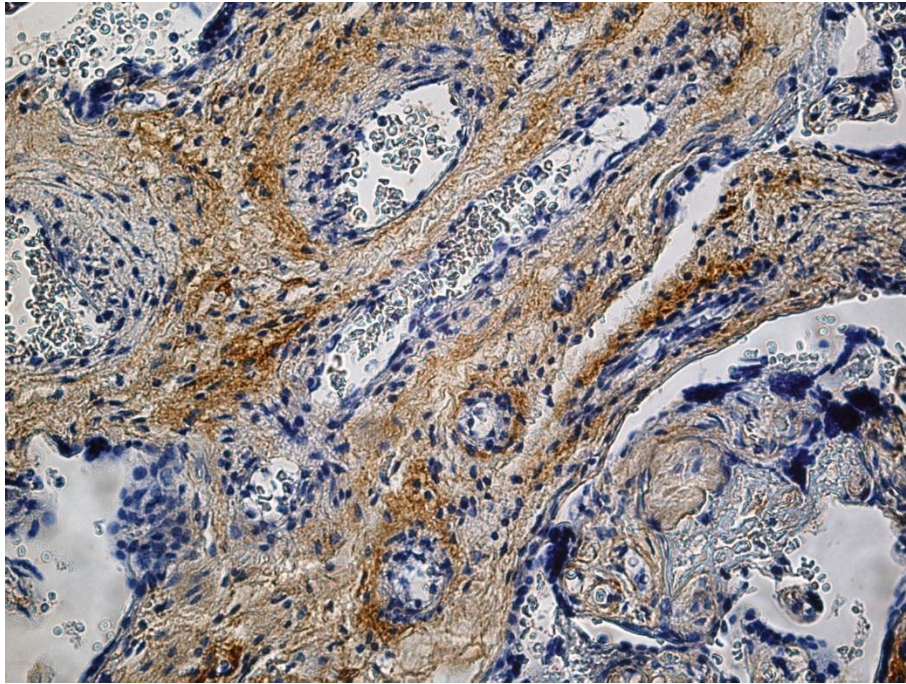


Figure 60. Tertiary villi of a transitional placenta of 40 gestational weeks with abundance (+++++) of Collagen IV containing basal lamina
 Mother 39 years of age, vaginal delivery of a boy of 4180g. The boy was healthy, discharged home in 7 days. Study group G1 (healthy term)
 Collagen IV IHC, X 250.

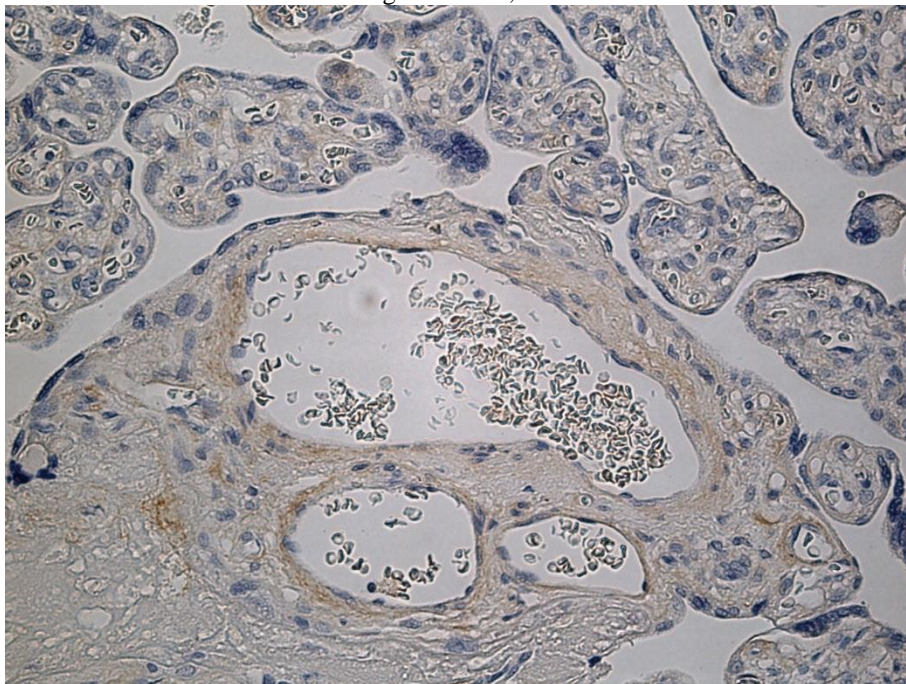


Figure 61. Tertiary villi of a transitional placenta of 34 gestational weeks with occasional (0/+) Collagen IV containing basal lamina
 Note large sinusoid capillaries and a zone of destruction (*). Mother 27 years of age, delivery by emergency Cesarean section; a girl of 2320g. The girl presented favorable clinical course for the gestational age and was discharged home in 7 days. Study group G2 (normal pre-term)
 Collagen IV IHC, X 250.

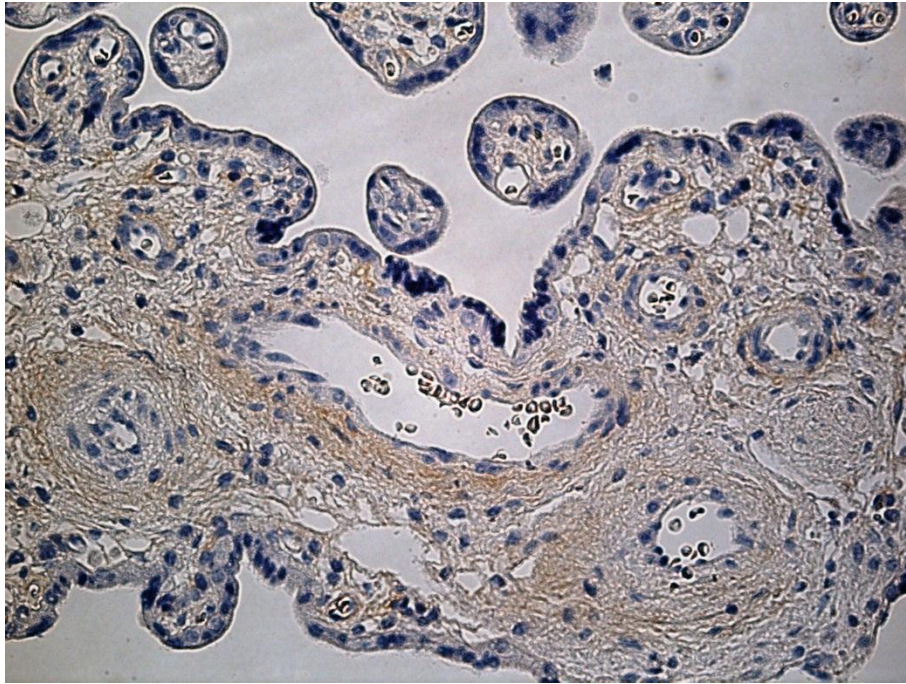


Figure 62. Tertiary villi of a young placenta of 23 gestational weeks with a few (+) Collagen IV containing basal lamina

Mother 36 years of age, vaginal delivery of a boy of 650g. The boy died on the 3rd day of life due to extreme prematurity. Study group G2 (normal pre-term)
Collagen IV IHC, X 250.

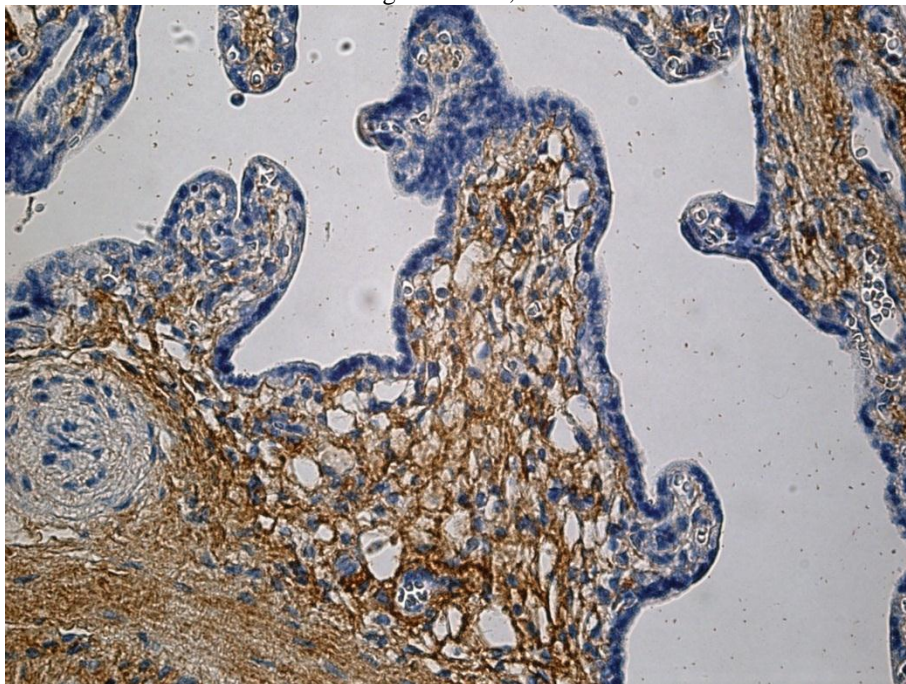


Figure 63. Edematous tertiary villi of a transitional placenta of 28 gestational weeks with numerous (+++) Collagen IV containing basal lamina

Notice obliterated blood vessel. Mother 34 years of age, vaginal delivery of a girl of 1290g. The girl presented favorable clinical course for the gestation. Study group G2 (normal pre-term)
Collagen IV IHC, X 250.

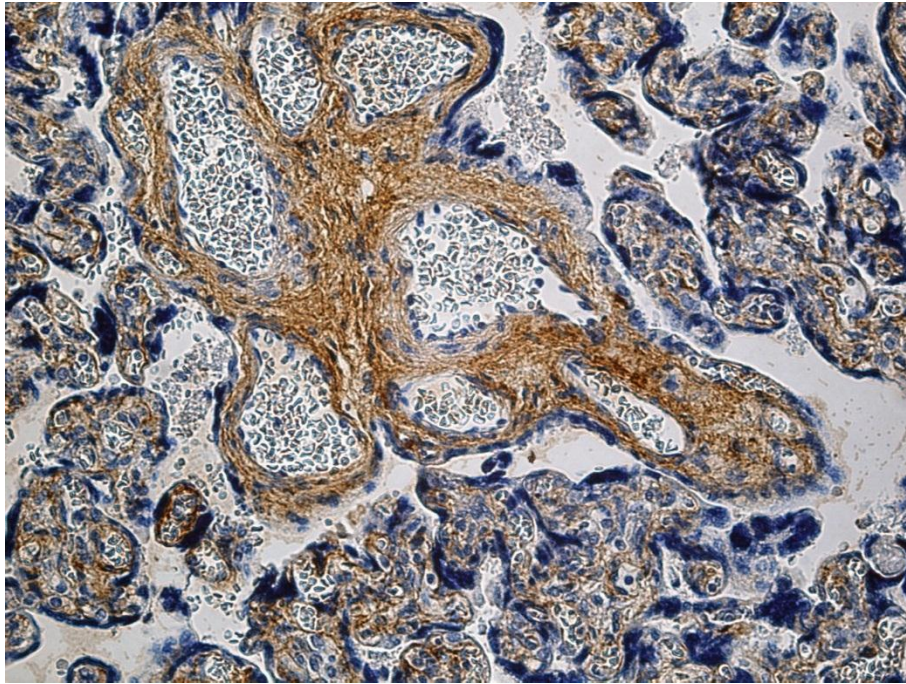


Figure 64. Tertiary villi of a transitional placenta of 40 gestational weeks with numerous (++++) Collagen IV containing basal lamina

Mother 26 years of age, vaginal delivery of a boy of 4330g. The boy developed early neonatal sepsis; causative agent was not identified. Study group G3 (distress)
Collagen IV IHC, X 250.

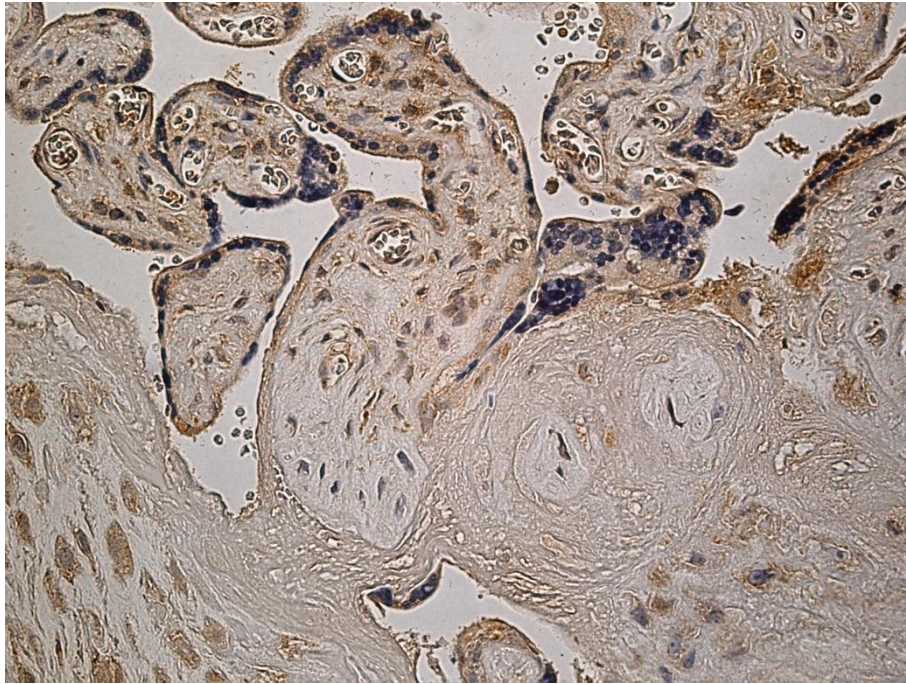


Figure 65. Maternal part and tertiary villi of a transitional placenta of 39 gestational weeks with moderate (++) number of MMP9 containing cells of extravillous trophoblast, extraembryonic mesoderm, cytotrophoblast and syncytiotrophoblast

Mother 30 years of age, delivery by emergency Cesarean section; a girl of 3810g. The girl was healthy and was discharged home in 7 days. Study group G1 (healthy term)

MMP9 IHC, X 250.

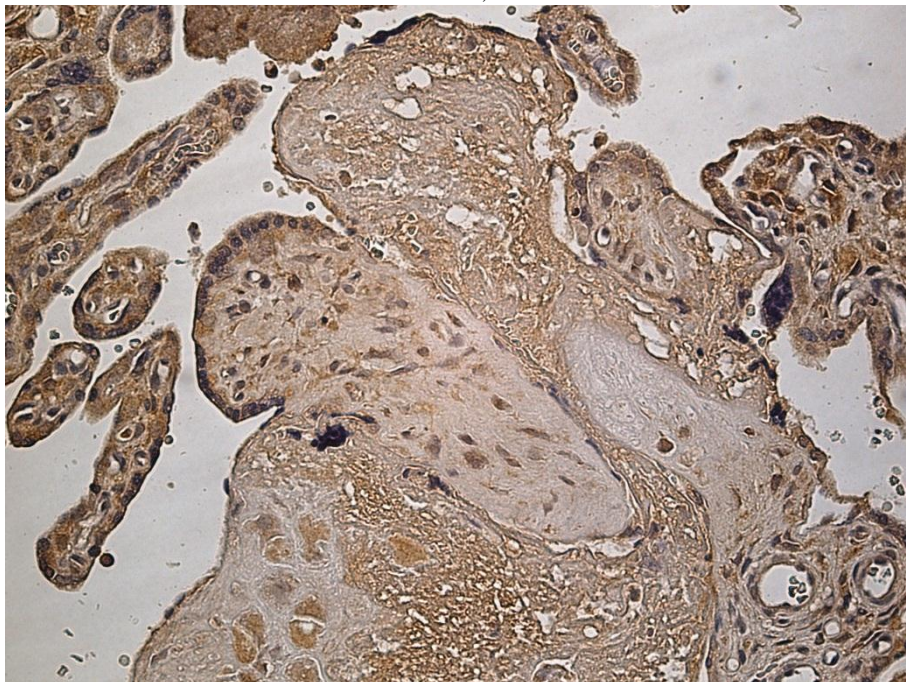


Figure 66. Maternal part and tertiary villi of a young placenta of 24 gestational weeks with moderate (++) amount of MMP9 containing Hofbauer cells, cells of extraembryonal mesoderm, cytotrophoblast and syncytiotrophoblast

Mother 29 years of age, vaginal delivery of a girl of 720g. The girl presented favorable clinical course for the gestational age. Study group G2 (normal pre-term)

MMP9 IHC, X 250.

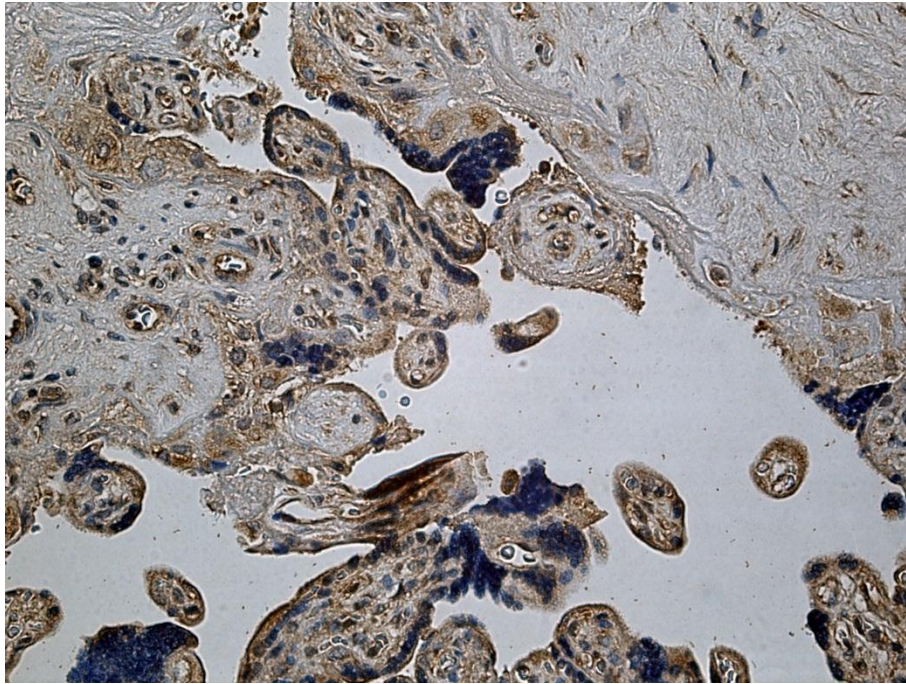


Figure 67. Maternal part and tertiary villi of a transitory placenta of 33 gestational weeks with moderate (++) amount of MMP9 containing Höfbauer and cytotrophoblast cells Mother 36 years of age, delivery by emergency CS a girl of 1888g. The girl presented favorable clinical course and was discharged home in 7 days. Study group G2 (normal pre-term)
MMP9 IHC, X 250.

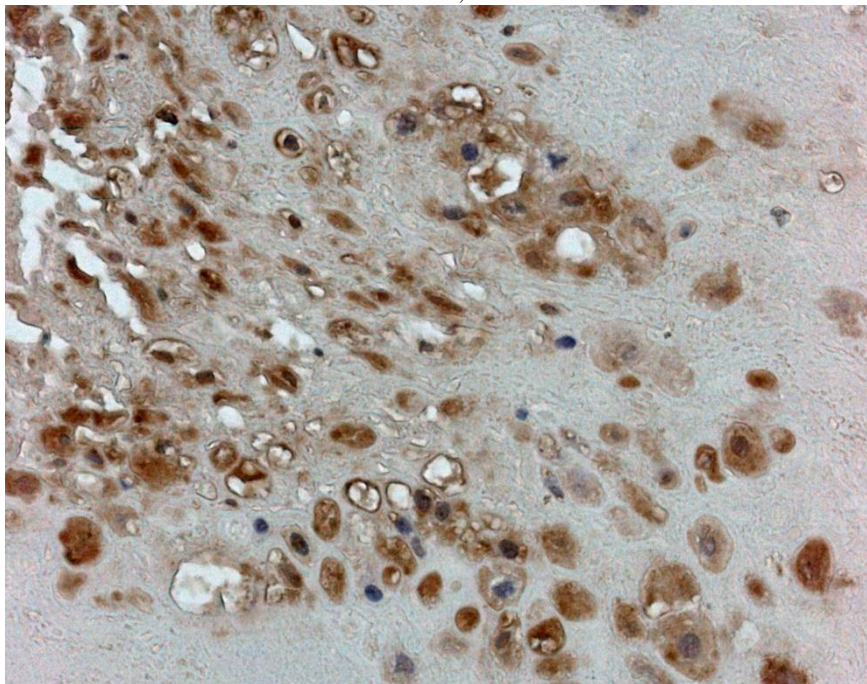


Figure 68. Maternal part of a transitory placenta of 40 gestational weeks with numerous (++++) MMP9 containing Höfbauer and extravillous trophoblast cells Mother 30 years of age, delivery by emergency Cesarean section; a stillborn girl of 4630g. Study group G3 (distress)
MMP9 IHC, X 400.

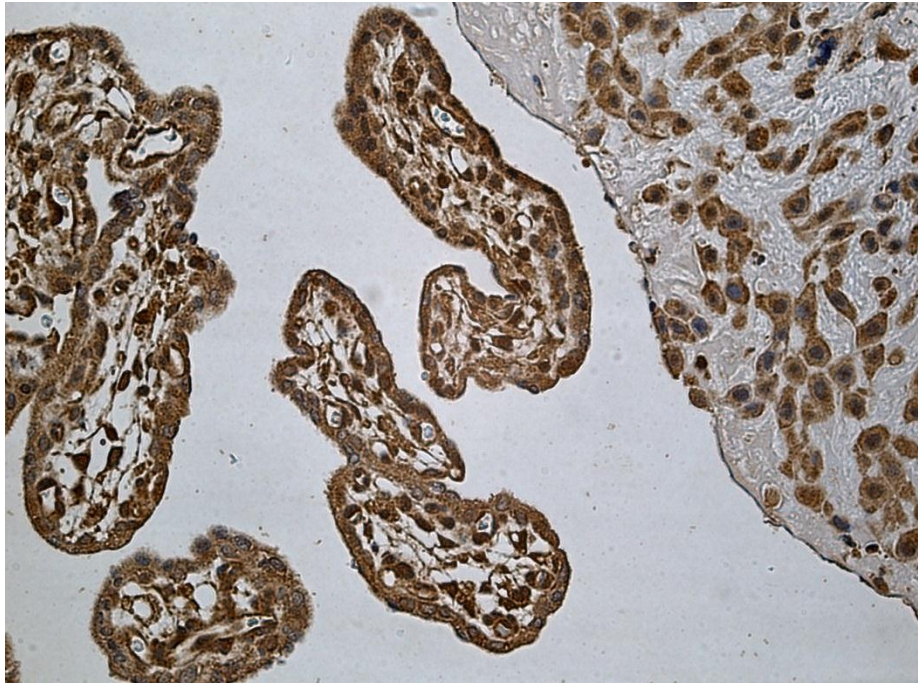


Figure 69. Maternal part and tertiary villi of a young placenta of 23 gestational weeks with abundance (++++) of MMP9 containing extravillous trophoblast, cytotrophoblast and syncytiotrophoblast cells

Mother 25 years of age, vaginal delivery of a stillborn boy of 905g. Study group G3 (distress)
MMP9 IHC, X 250.

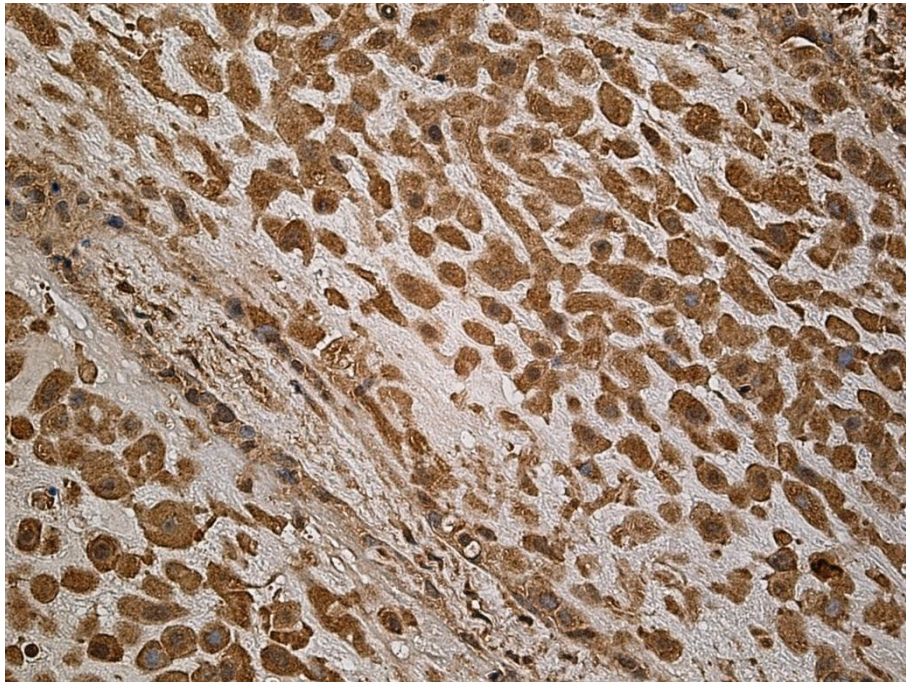


Figure 70. Maternal part of a young placenta of 23 gestational weeks with abundance (++++) of MMP9 containing extravillous trophoblast and Höfbauer cells

Note obliterated blood vessel. Mother 25 years of age, vaginal delivery of a stillborn boy of 905g.
Study group G3 (distress)
MMP9 IHC, X 250.

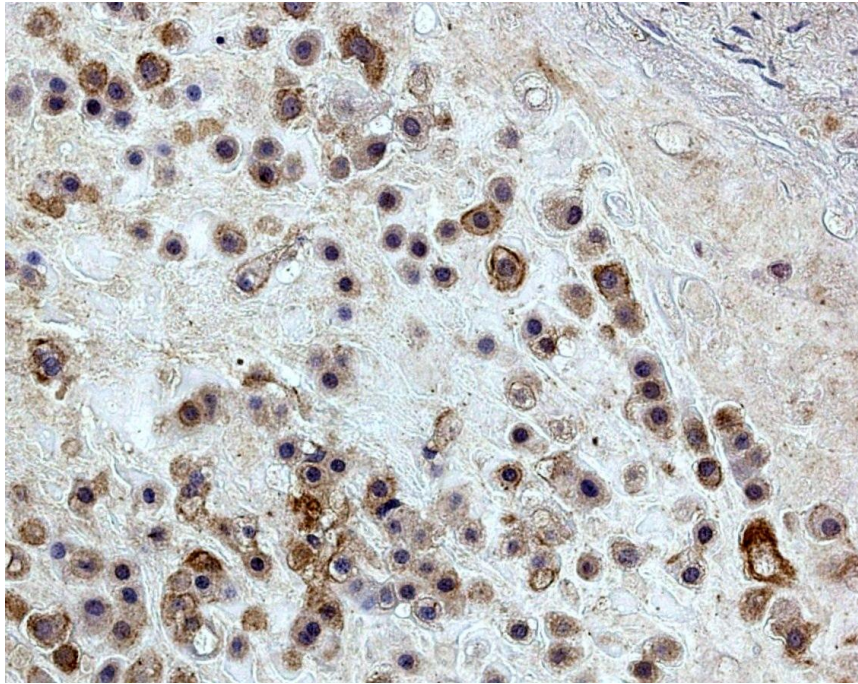


Figure 71. Maternal part of a 31 gestational week placenta with moderate (++) HoxB3 containing extravillous trophoblast and Höfbauer cells

Mother 34 years of age, delivery by emergency Cesarean section; a girl of 1780g. The girl presented appropriate clinical course for the gestation. Study group G2 (normal pre-term)
HOXB3 IHC, X 250.

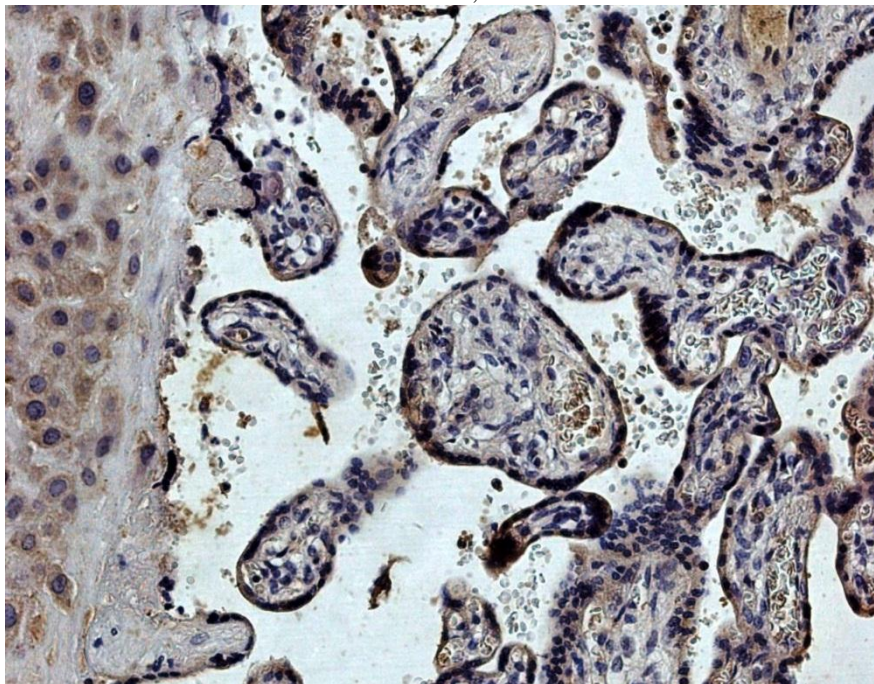


Figure 72. Maternal part and tertiary villi of a young placenta of 31 gestational weeks with numerous (+++) HoxB3 containing cells of extravillous trophoblast, cytotrophoblast and syncytiotrophoblast (G3).

Mother 38 years of age, vaginal delivery by emergency Cesarean section; a boy of 1896g. The boy presented insufficient lung maturity for the gestation. Study group G3 (distress)
HOXB3 IHC, X 250.

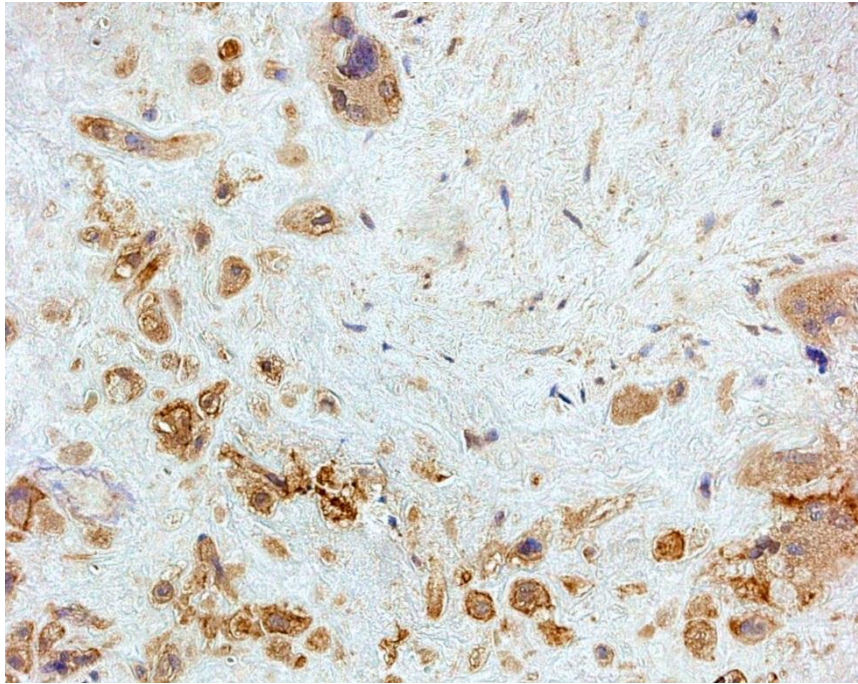


Figure 73. Maternal part of a 32 gestational week placenta with numerous (+++) HoxB3 containing Höfbauer cells

Mother 33 years of age, delivery by emergency CS of a girl of 1088g. The girl was small for the gestational age and presented favorable clinical course for the gestational age and birth weight. Study group G3 (distress)
HOX B3, X 250.

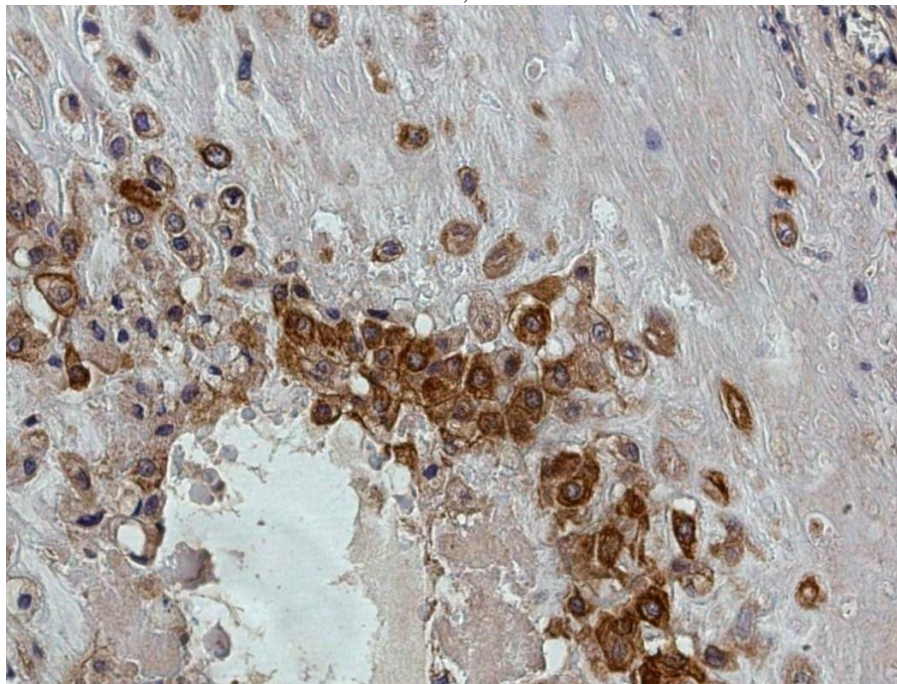


Figure 74. Maternal part of a 40 gestational week placenta with numerous (+++) HoxB3 containing extravillous trophoblast and Höfbauer cells

Mother 25 years of age, vaginal delivery of a boy of 4330g. The boy developed early neonatal sepsis with pneumonia and meningitis; causative agent was not identified. Study group G3 (distress)
HOX B3 IHC, X 250.