Histology and Histochemistry of Placenta in Pregnancies Complicated by Preeclampsia

**Figure 6**

Fetal surface of preeclamptic placenta

**Figure 7**

Maternal surface of preeclamptic placenta

Arrows showing areas of infarcts
**Figure 8**

Control placenta (10X)

**Figure 9**

Preeclamptic placenta (10 X)
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Figure 10

Control placenta (40X)

Arrows showing syncytial knots per high power field

Figure 11

Preeclamptic placenta (40X)

Arrows showing increased syncytial knots per high power field
**Figure 12**

Control placenta (40X)
Arrows showing cytotrophoblast cells

**Figure 13**

Preeclamptic placenta (40X)
Arrows showing cytotrophoblast cell proliferation
Figure 14

Control placenta (100X)
Arrows showing cytotrophoblast cells

Figure 15

Preeclamptic placenta (100X)
Arrows showing cytotrophoblast cell proliferation
Figure 16

Preeclamptic placenta (100X)
Arrows showing cytotrophoblast cell proliferation
Figure 17

Figure- Control placenta (100X)
Arrows showing basement membrane

Figure 18

Preeclamptic placenta (100X)
Arrows showing basement membrane thickening
Figure 19

Preeclamptic placenta (100X)

Arrows showing basement membrane thickening
Figure 20

Control placenta (40X)
Arrows showing vasculosyncytial membranes

Figure 21

Preeclamptic placenta (40X)
Arrows showing small fetal blood vessels. Paucity of vasculosyncytial membranes observed.
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Figure 22

Control placenta (100X)
Arrows showing vasculosyncytial membranes

Figure 23

Preeclamptic placenta (100X)
Paucity of vasculosyncytial membranes observed.
Arrows showing cytotrophoblast cells between fetal blood vessels and syncytium
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Figure 24

Control placenta (100X)

Stromal fibrosis or fibrinoid necrosis is not observed

Figure 25

Preeclamptic placenta (100X)

Arrow showing stromal fibrosis
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Figure 26

Preeclamptic placenta (100X)

Arrow showing stromal fibrosis
Figure 27

Preeclamptic placenta (100X)

Arrow showing fibrinoid necrosis

Figure 28

Preeclamptic placenta (100X)

A- Fibrinoid necrosis  B- Fetal blood vessel
Figure 29

Control placenta (100X)

Arrows showing large fetal blood vessels
Figure 30

Preeclamptic placenta (40X)
Hypovascular villi and regression of villous capillaries observed

Arrows showing small fetal blood vessels.
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Figure 31

Preeclamptic placenta (100X)
Hypovascular villi and regression of villous capillaries observed.
Arrows showing small fetal blood vessels.
Figure 32

Preeclamptic placenta (10X)
Arrows showing endarteritis obliterans

Figure 33

Preeclamptic placenta (10X) Arrows showing endarteritis obliterans
Figure 34

Preeclamptic placenta (100X)

Arrow showing endarteritis obliterans
Figure 35

Preeclamptic placenta (40X)
Arrow showing tunica media proliferation

Figure 36

Preeclamptic placenta (100X)
Tunica media proliferation observed
Figure 46

Control placenta (10X)

Figure 47

Preeclamptic placenta (10X)
**Figure 48**

Control placenta (100X)

A - Glycogen deposits observed on basement membrane

B - Around fetal blood vessels
Figure 49

Control placenta (100X) PAS activity

A- Glycogen deposits observed on basement membrane

B- Around fetal blood vessels

C- Syncytiotrophoblast
Figure 50

Preeclamptic placenta (100X) PAS activity

A- Basement membrane
B- Around fetal blood vessels
C- Connective tissue stroma
D- Syncytiotrophoblast
Figure 51

Preeclamptic placenta PAS (100X)
Arrows showing increased PAS activity

A- Basement membrane
B- Around fetal blood vessels
C- Connective tissue stroma
D- Syncytiotrophoblast
Figure 52

Control placenta (100X)
Arrows showing basement membrane

Figure 53

Preeclamptic placenta (100X)
Basement membrane thickening observed
Figure 54

Preeclamptic placenta (100X)
Basement membrane thickening observed
**Figure 55**

Control placenta (10X)

**Figure 56**

Preeclamptic placenta (10X)
Control placenta (100X)
Arrows showing GAGS distribution on

A-Basement membrane
B-Syncytiotrophoblast
C-Around fetal blood vessels
D-Connective tissue stroma
Figure 58

Preeclamptic placenta (100X)

Arrows showing GAGS distribution on

A-Basement membrane
B-Syncytiotrophoblast
Figure 59

Preeclamptic placenta (100X)

Arrows showing GAGs staining only on syncytiotrophoblast
Figure 37

Control placenta. (10X) Arrows showing PALP activity.

Figure 38

Preeclamptic placenta. (10X) Arrows showing strong PALP activity.
Control placenta. (100X) PALP activity observed only on basal syncytial membrane.
A-Strong PALP activity observed on basement membrane of syncytiotrophoblast.
B,C - Moderate activity observed over cytoplasm and microvillous surface of syncytiotrophoblast.
D- No PALP activity observed on cytotrophoblast
E- No PALP activity observed on connective tissue stroma
Figure 41

Preeclamptic placenta (100X)

A- PALP activity observed on syncytiotrophoblast
B- PALP activity observed on cytotrophoblast
C- Connective tissue stroma does not show PALP activity
Figure 42

Preeclamptic placenta (100X)

A- PALP activity observed on syncytiotrophoblast
B- PALP activity observed on cytotrophoblast
C- Connective tissue stroma does not show PALP activity
Figure 43

A- PALP activity on syncytial basal membrane
B- PALP activity in syncytium cytoplasm and apical membrane.
C- PALP activity in connective tissue stroma
Preeclamptic placenta (100X)

A- Intense PALP activity observed on syncytial basal membrane.
B- Strong activity observed on syncytial microvillous surface
C- Strong PALP activity observed in cytoplasm of syncytiotrophoblast
D- PALP activity observed on cytотrophoblast
E- PALP activity observed in connective tissue stroma
Preeclamptic placenta (100X)

A. Strong PALP localisation observed in syncytiotrophoblast
B. Strong PALP localisation observed in connective tissue stroma
Figure 60

Control placenta. (10X) Arrows showing fat deposition

Figure 61

Preeclamptic placenta (10X)
Arrows showing increased fat deposits
**Figure 62**

Control placenta (100X)

Arrows showing fat deposition in connective tissue stroma

**Figure 63**

Preeclamptic placenta (100X)

Arrows showing increased fat deposition in connective tissue stroma
Control placenta (100X)
Arrows showing fat deposition

A-Basement membrane
B-Syncytium
C-Connective tissue stroma
Figure 65

Preeclamptic placenta (100X)
Arrows showing increased intensity of fat deposition

A-Basement membrane
B-Syncytium
C-Connective tissue stroma
**Figure 66**

Preeclamptic placenta (100X)
Arrows showing increased intensity fat deposition in connective tissue stroma

**Figure 67**

Preeclamptic placenta (100X)
Arrows showing increased intensity of fat deposition
Figure 68

Preeclamptic placenta (100X)

Arrows showing increased intensity of fat deposition in connective tissue stroma