

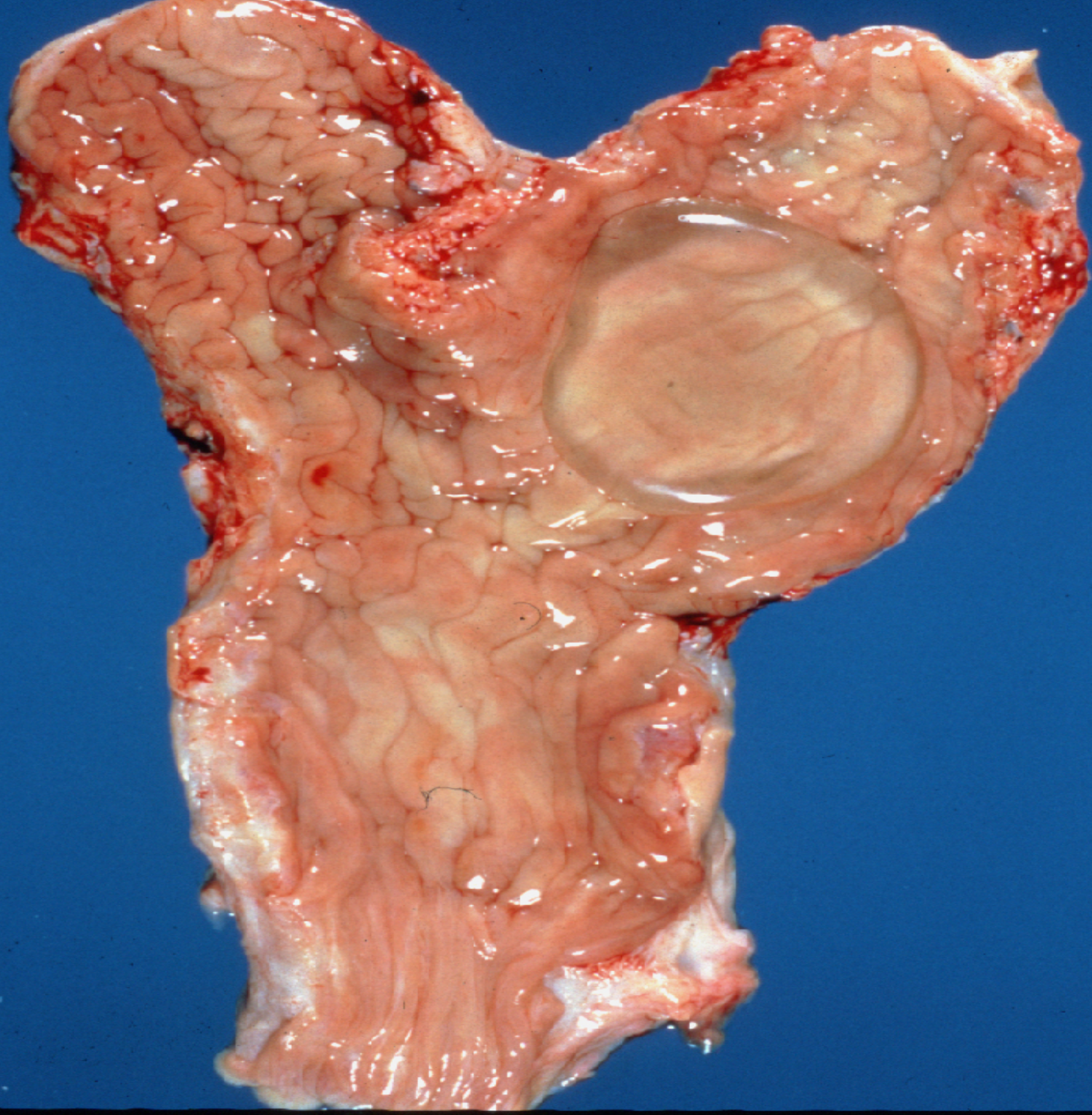
PLEASE NOTE

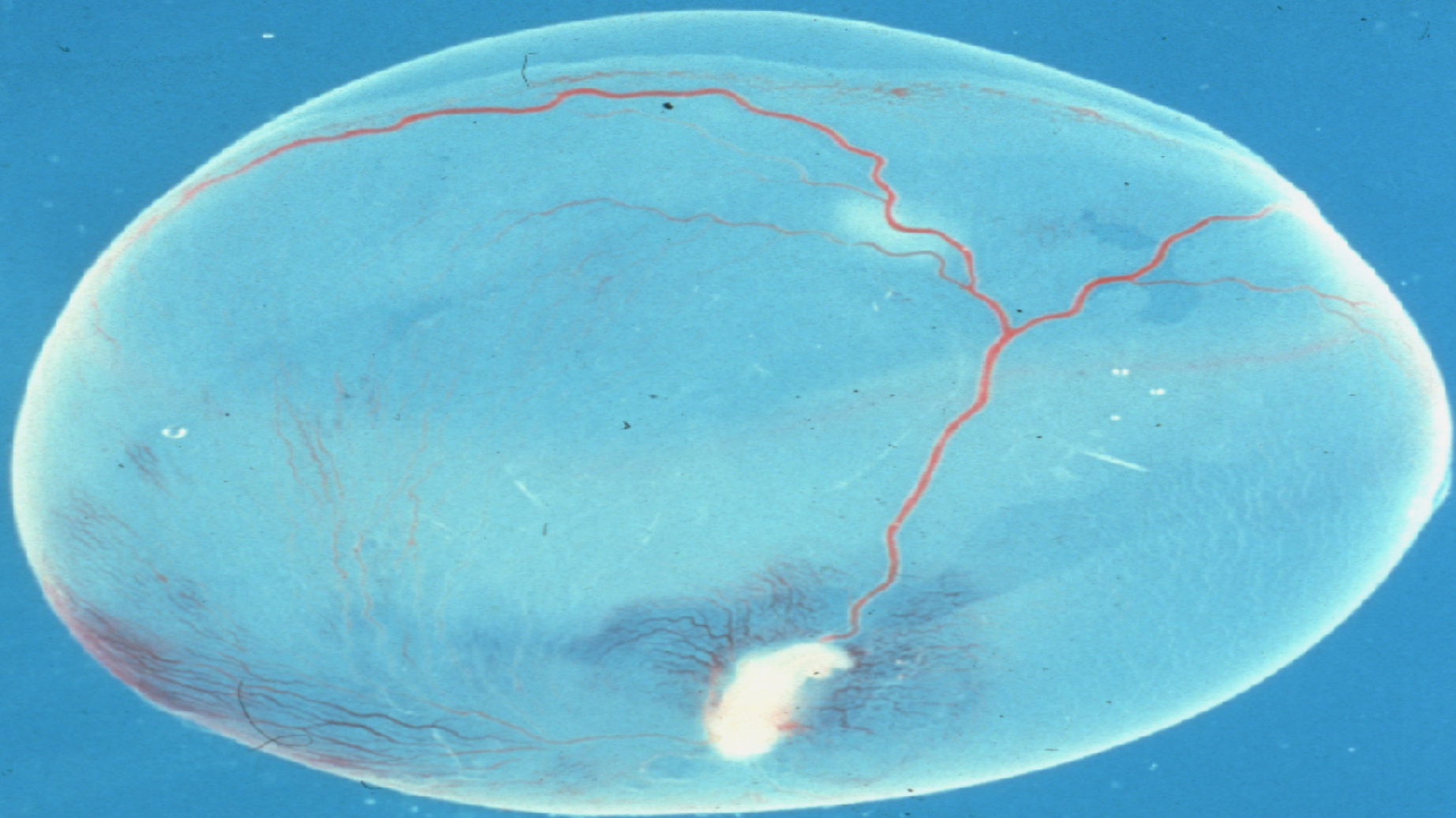
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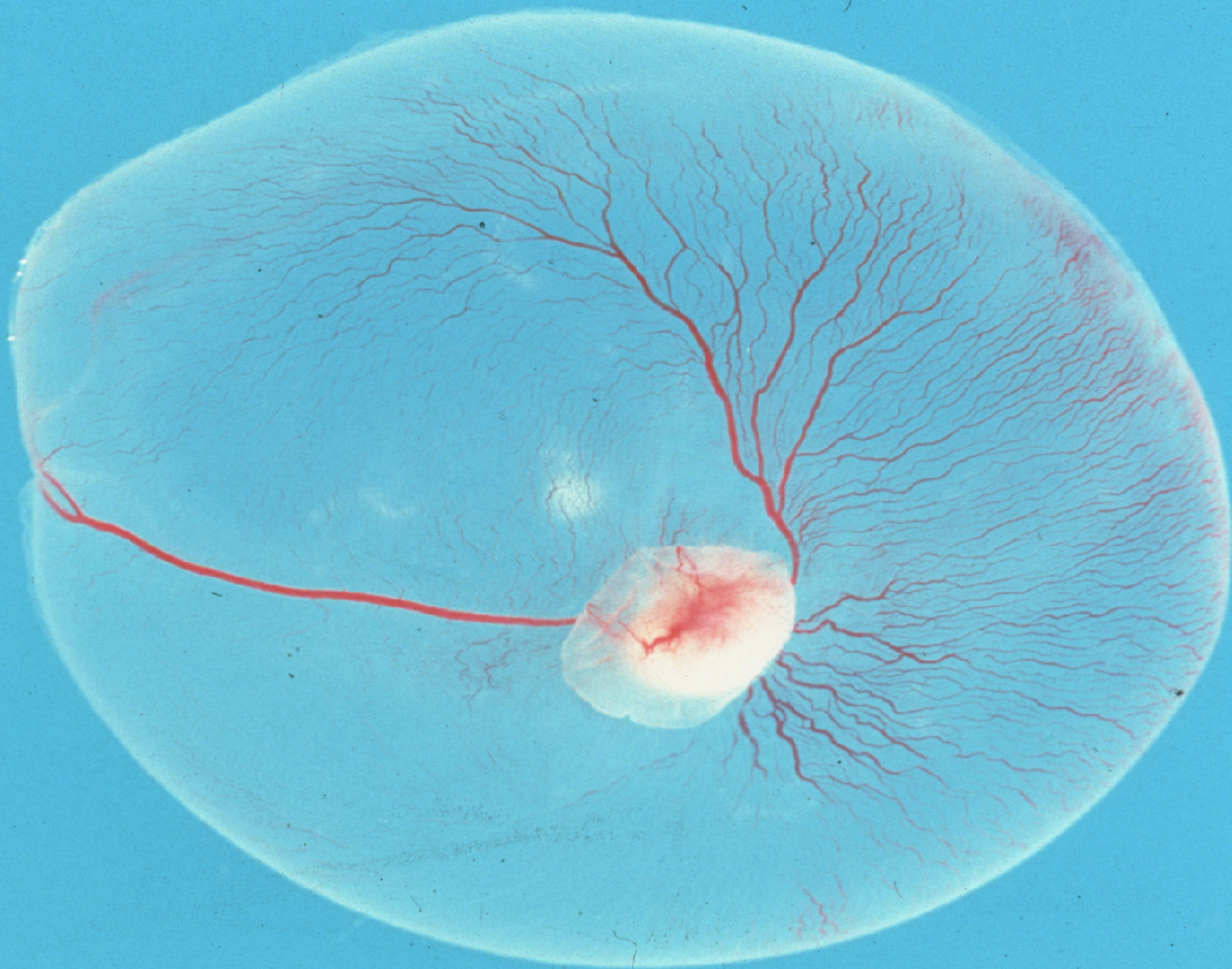
If you wish to view or purchase additional learning materials related to equine reproduction you are encouraged to visit Dr Ginther's site at

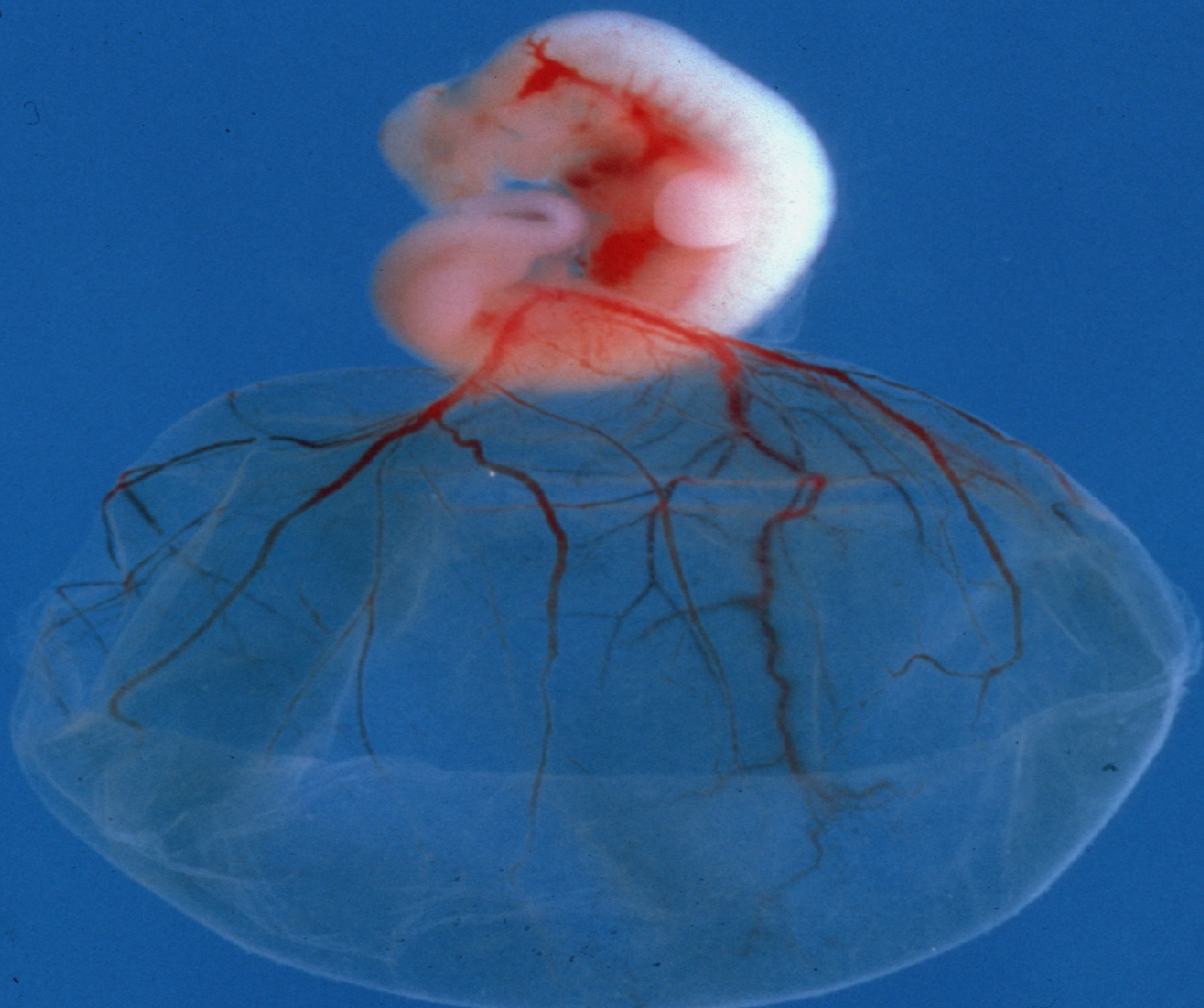
www.equipub.com

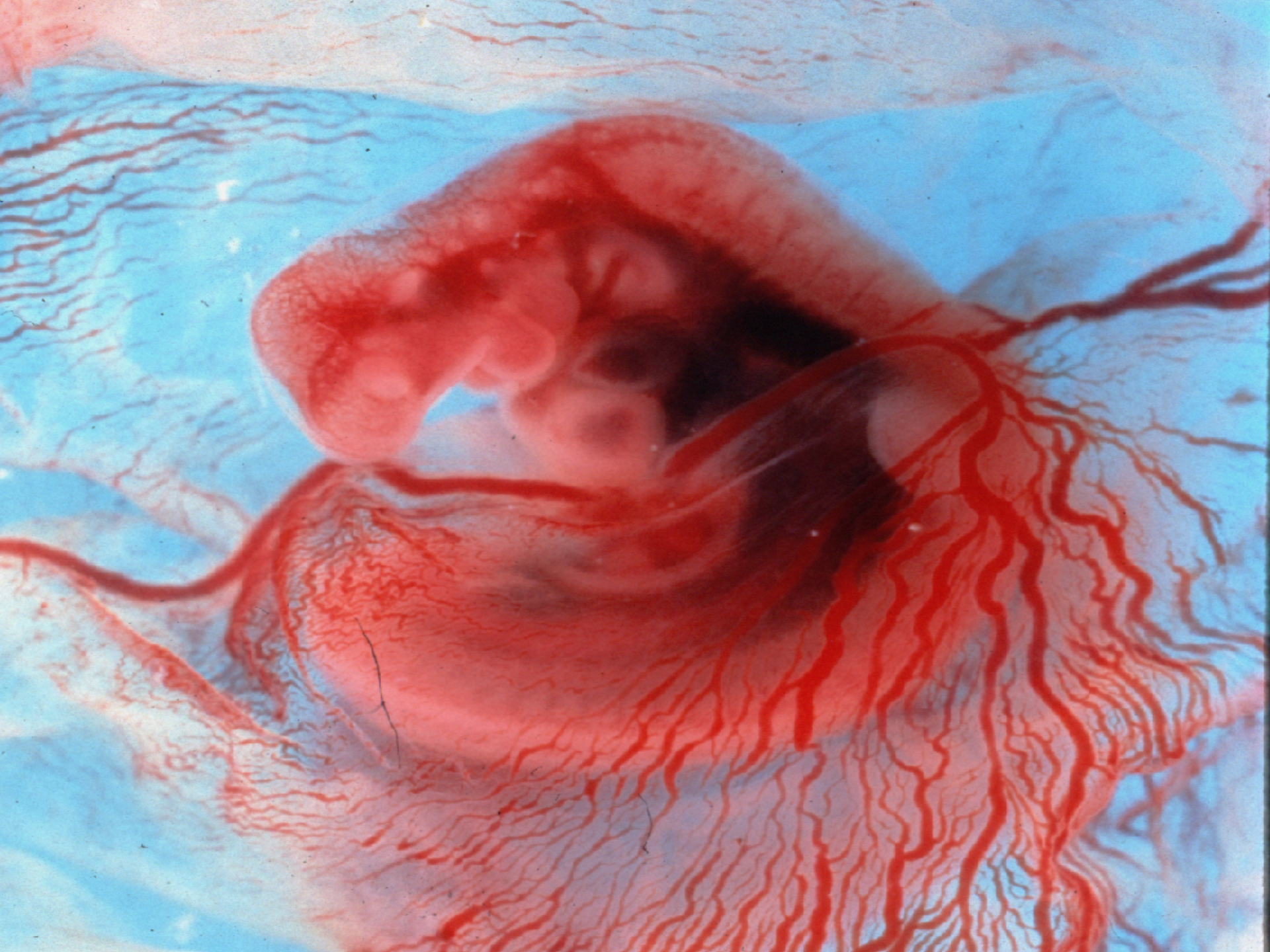


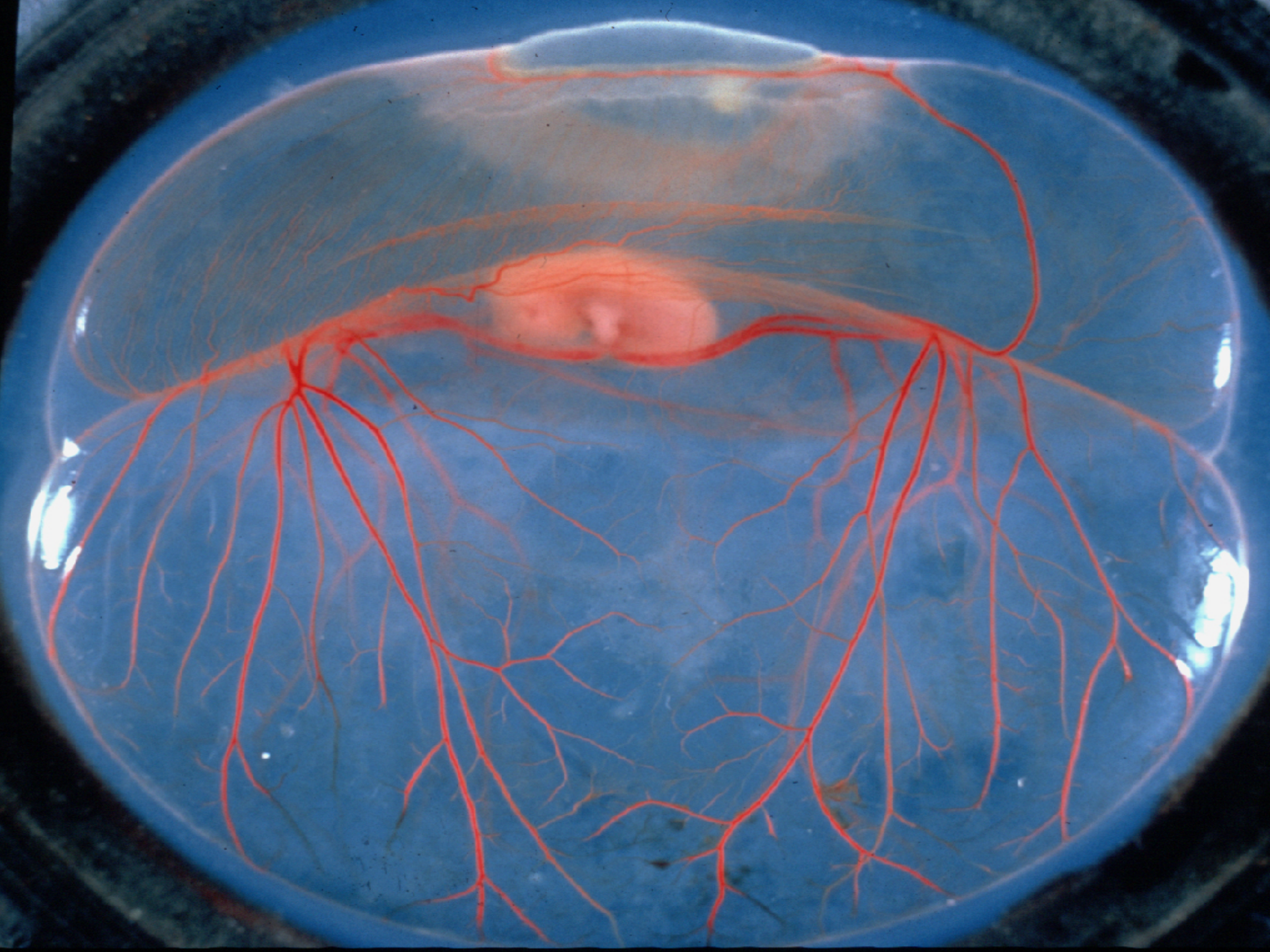


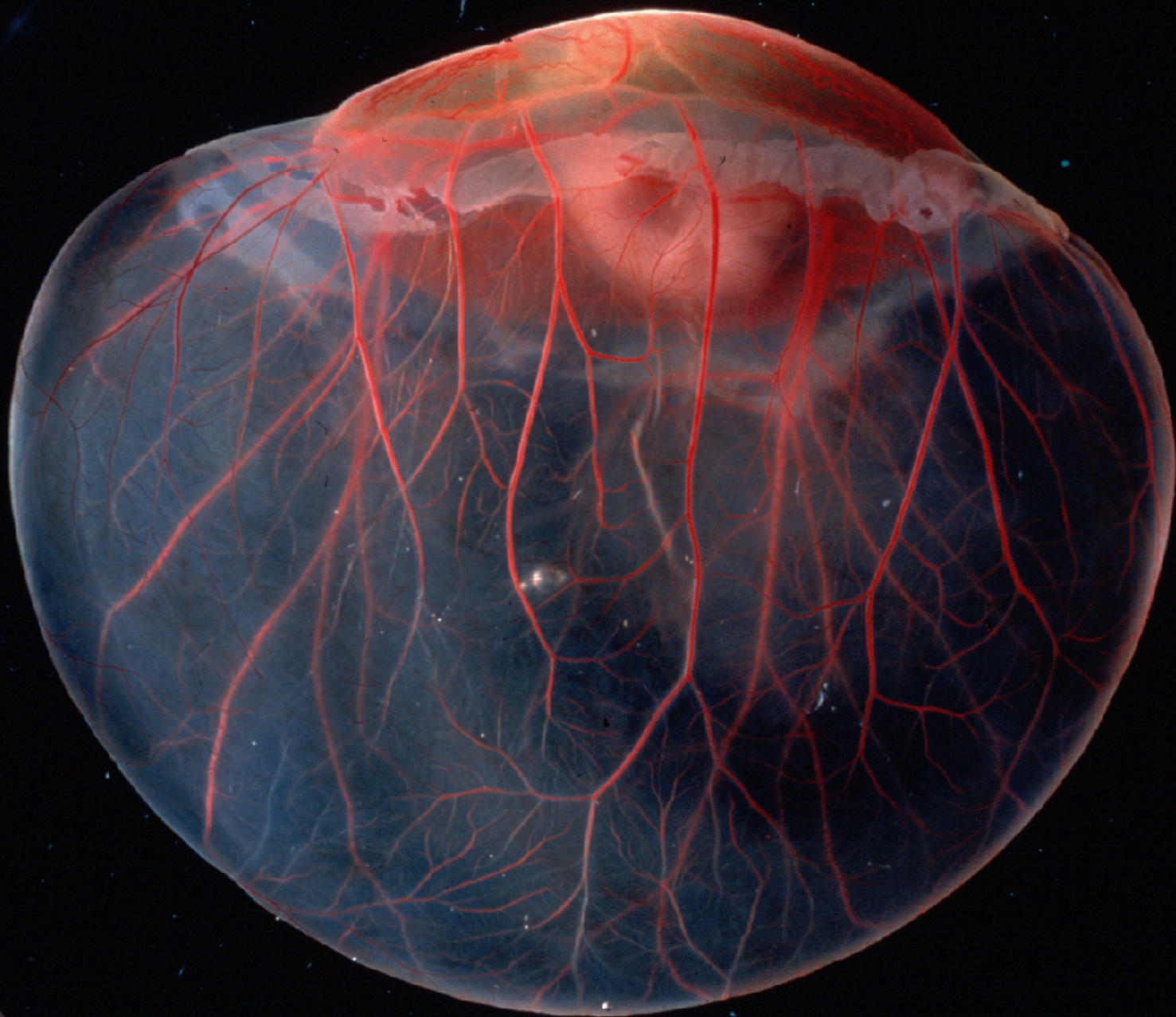


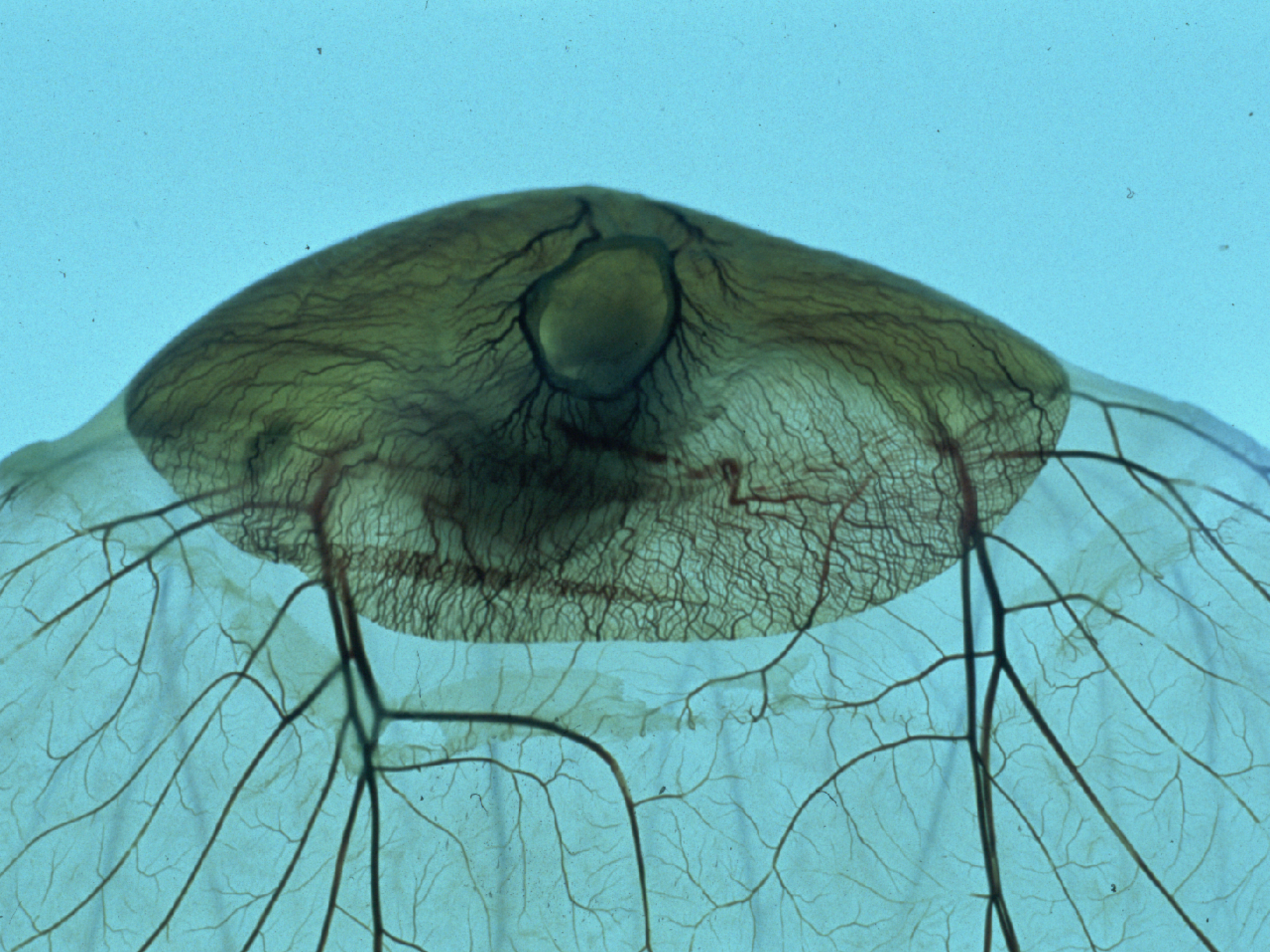


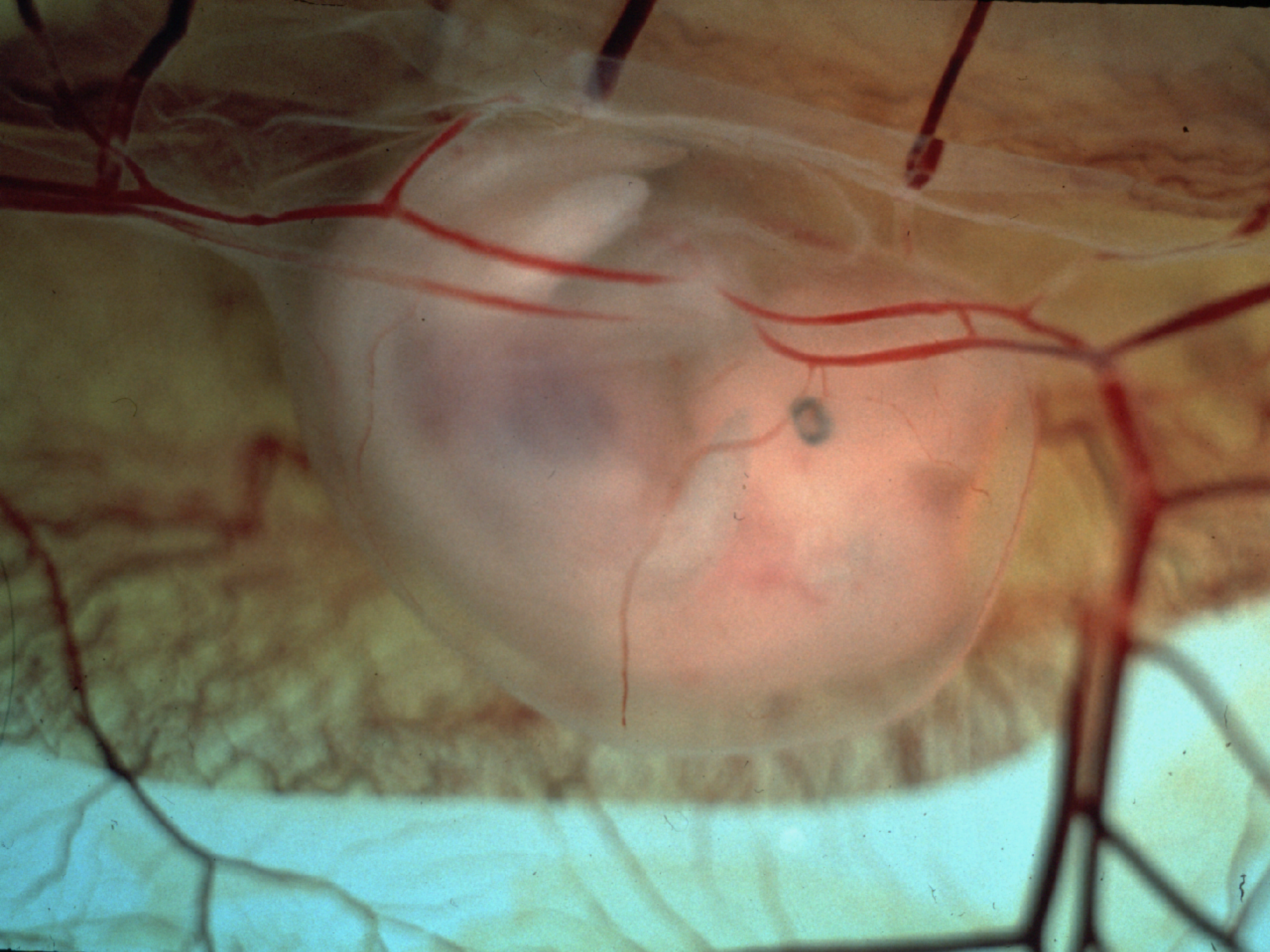


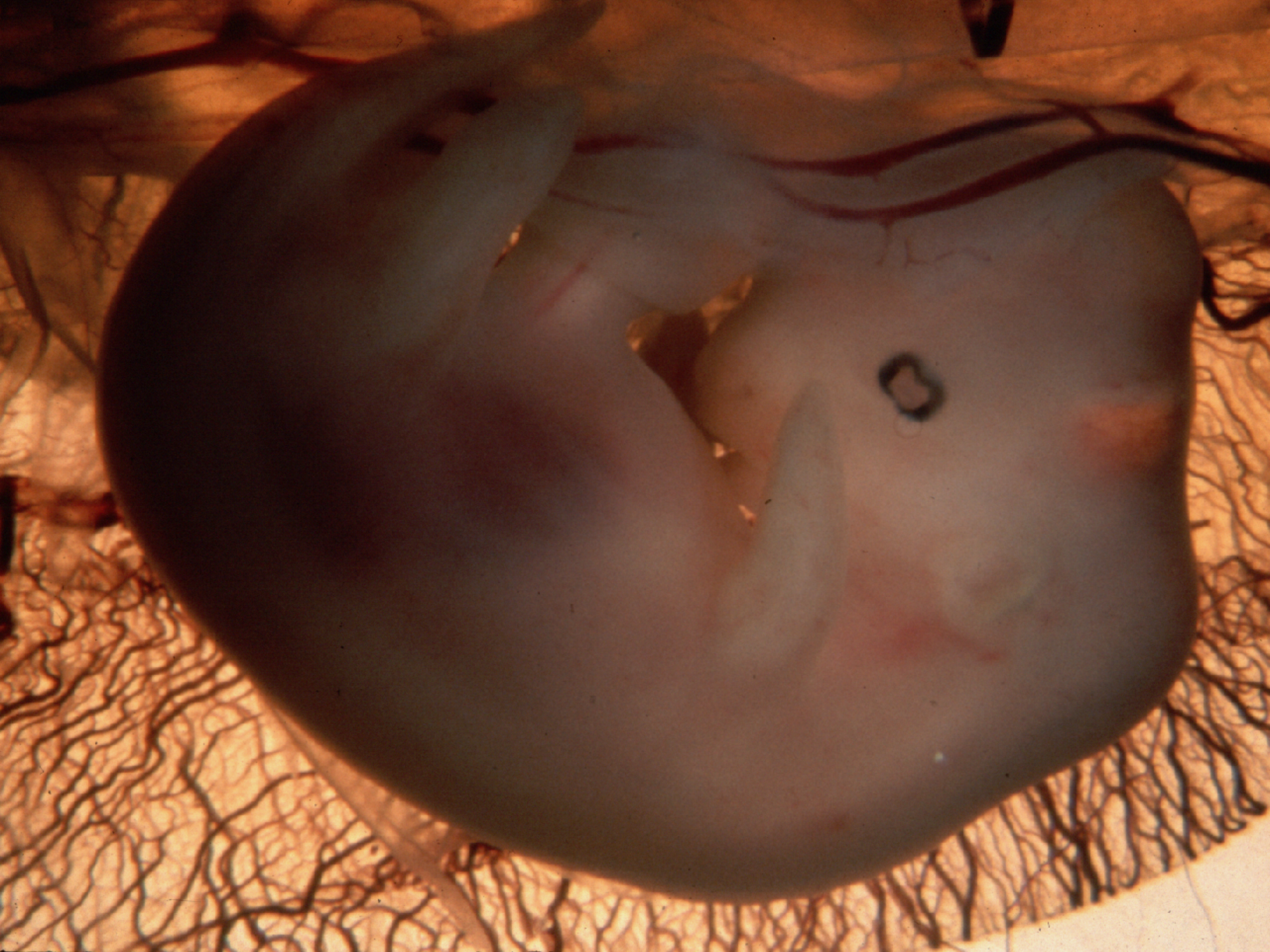


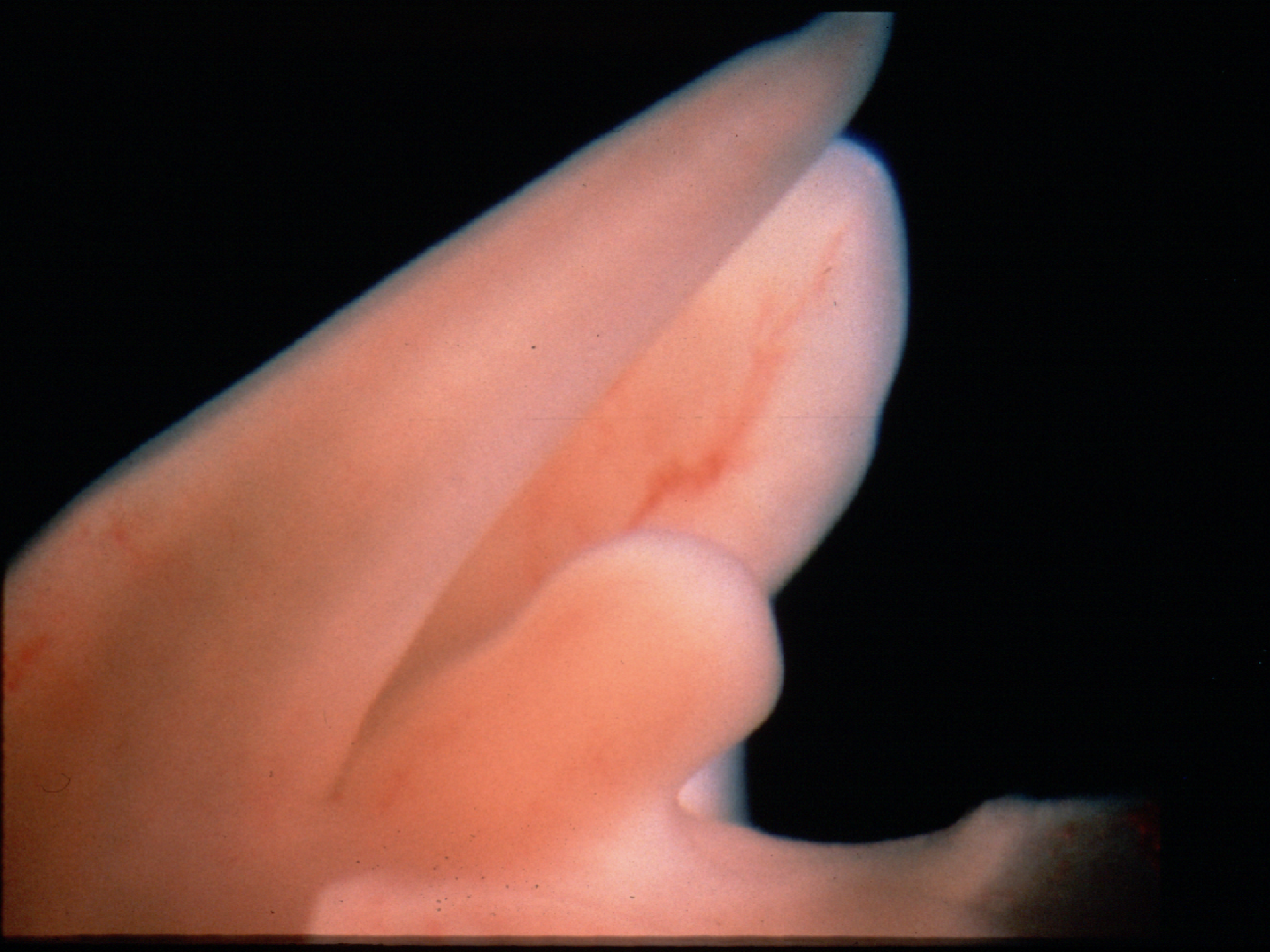


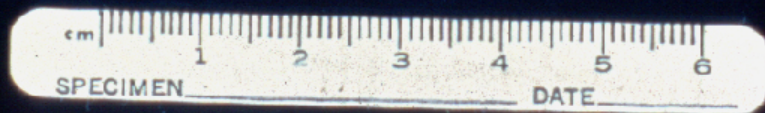
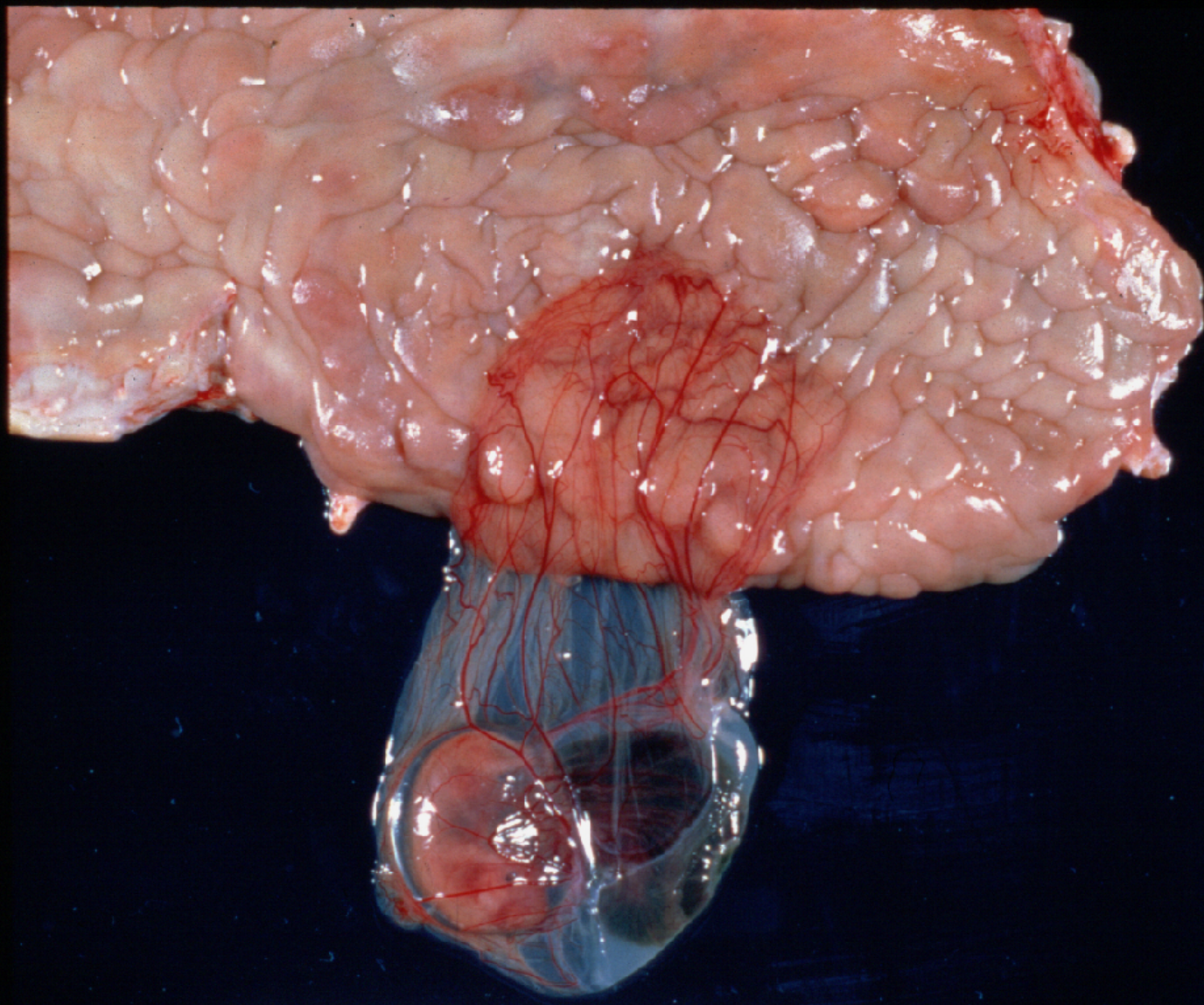




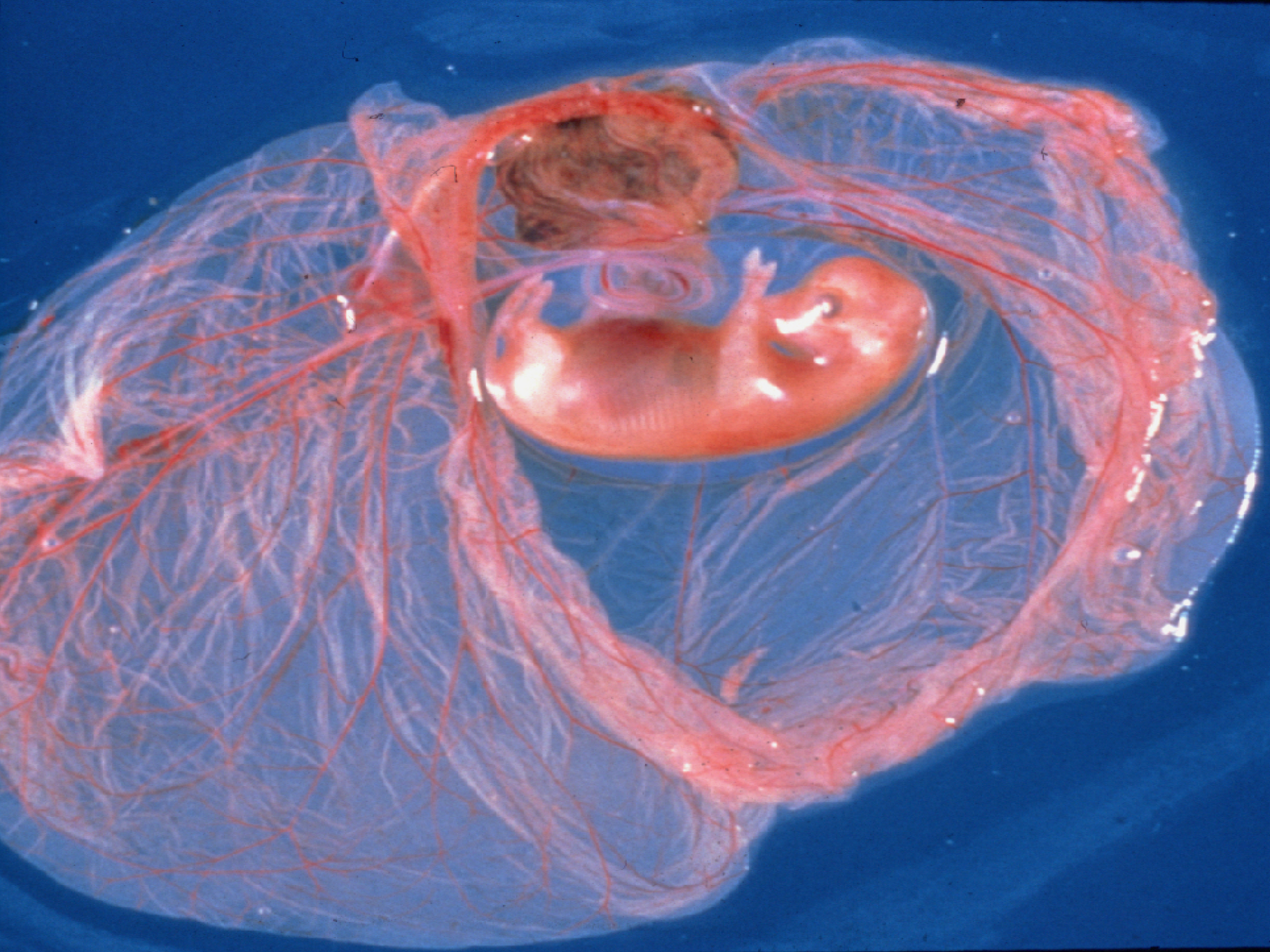




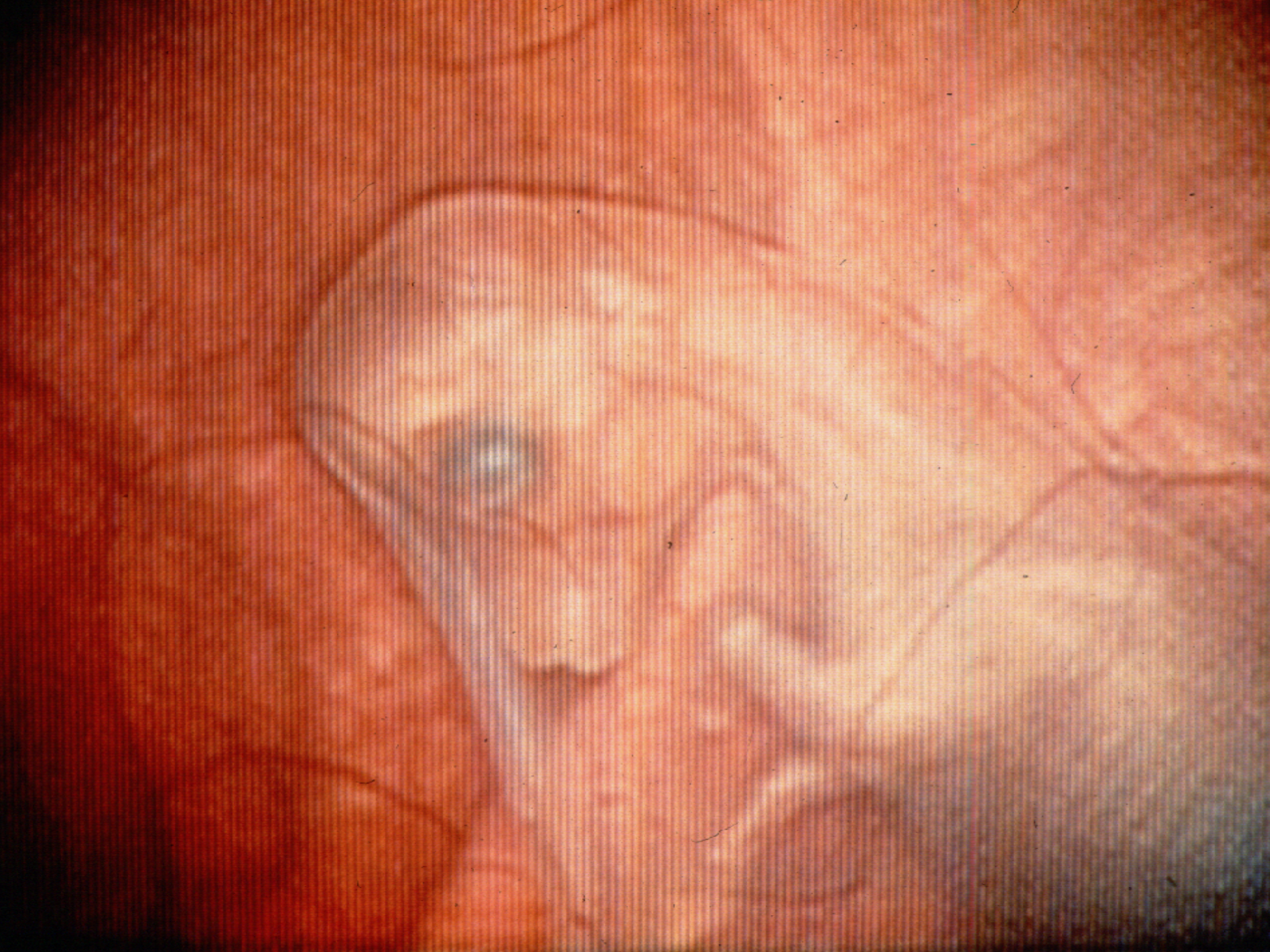


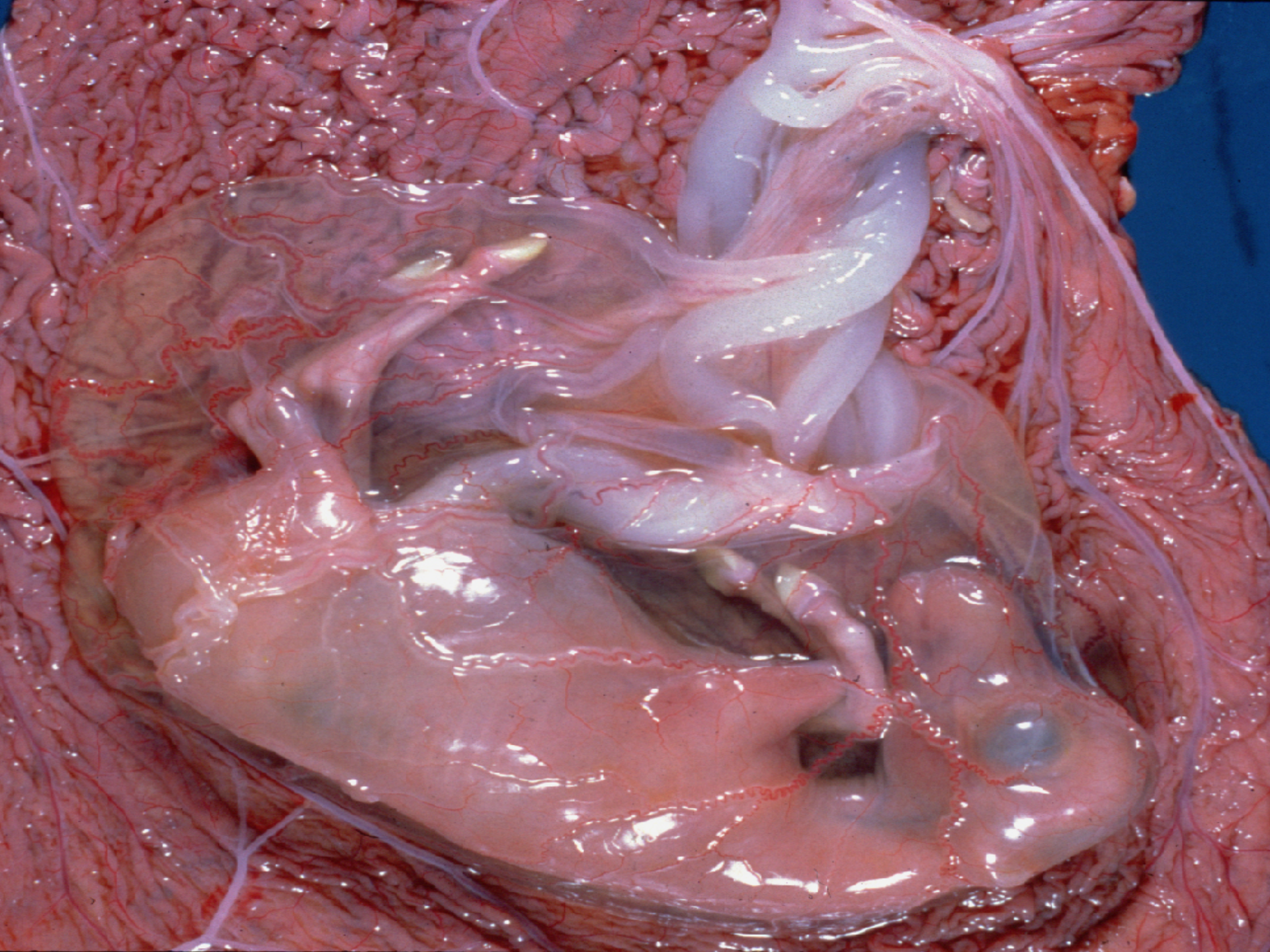




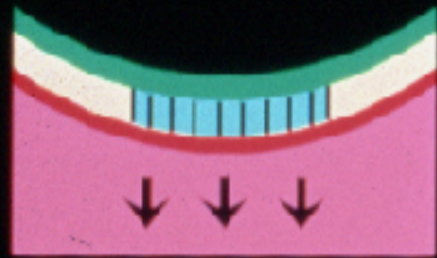






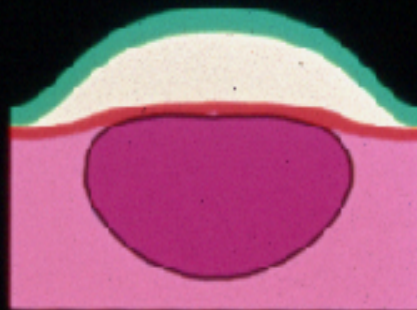


Day 37



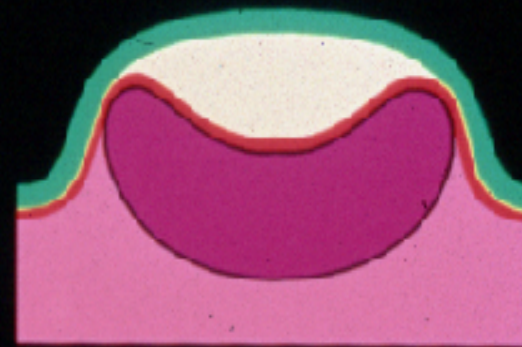
**Attachment and
invasion of chorionic
girdle cells**

Days 40-50



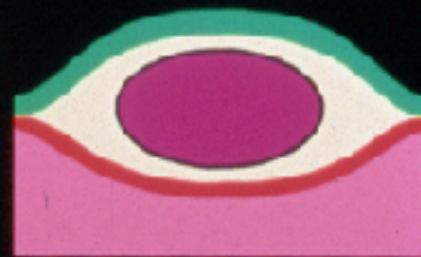
Developing cup

Days 50-60

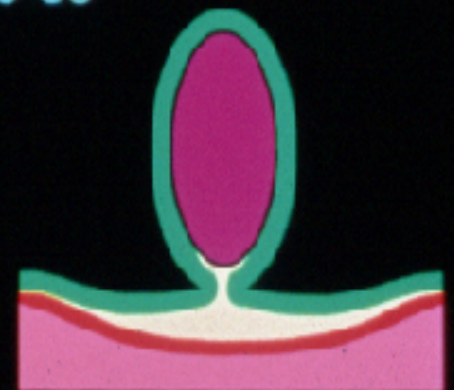


Mature cup

>Days 70-80

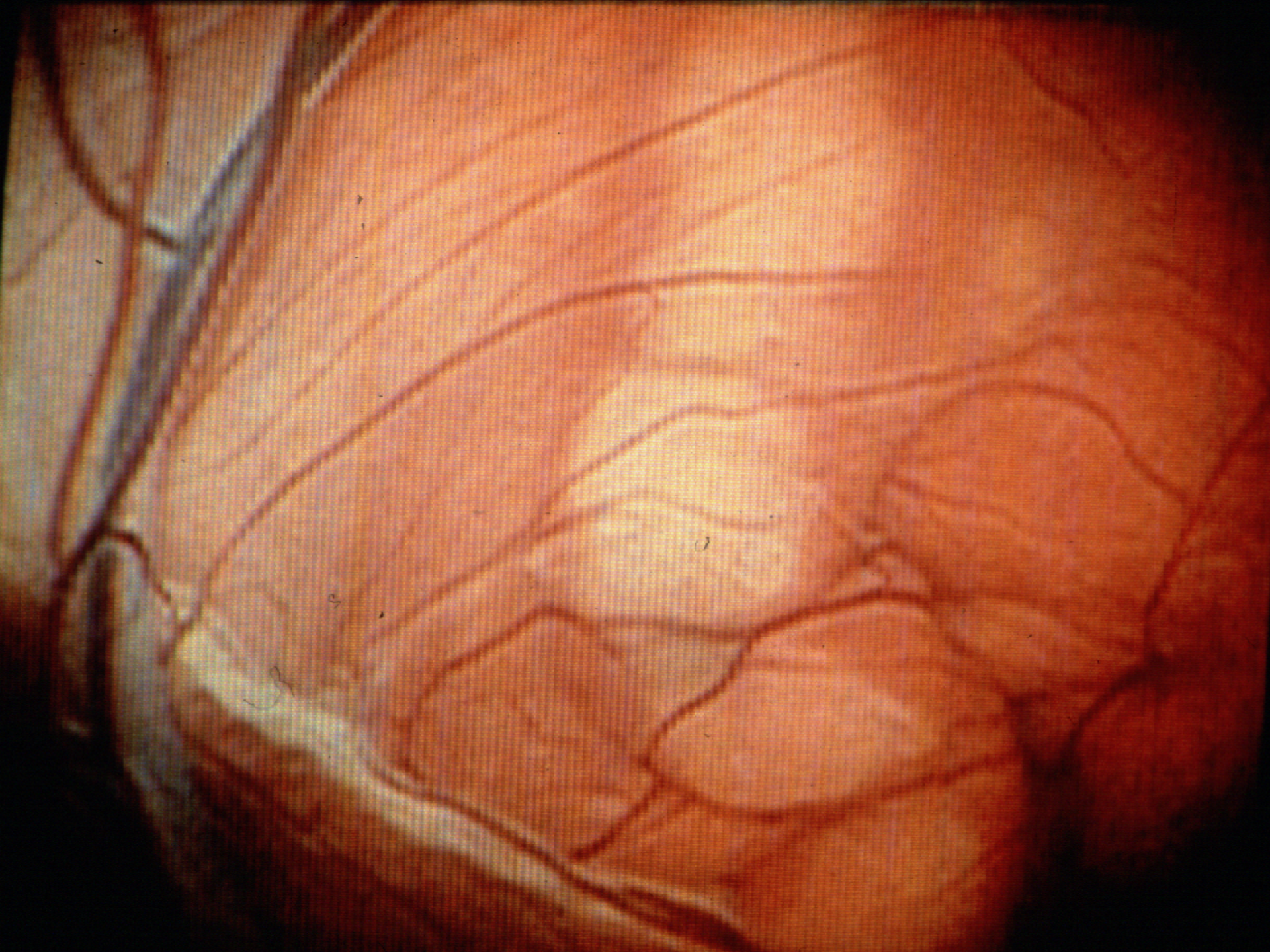


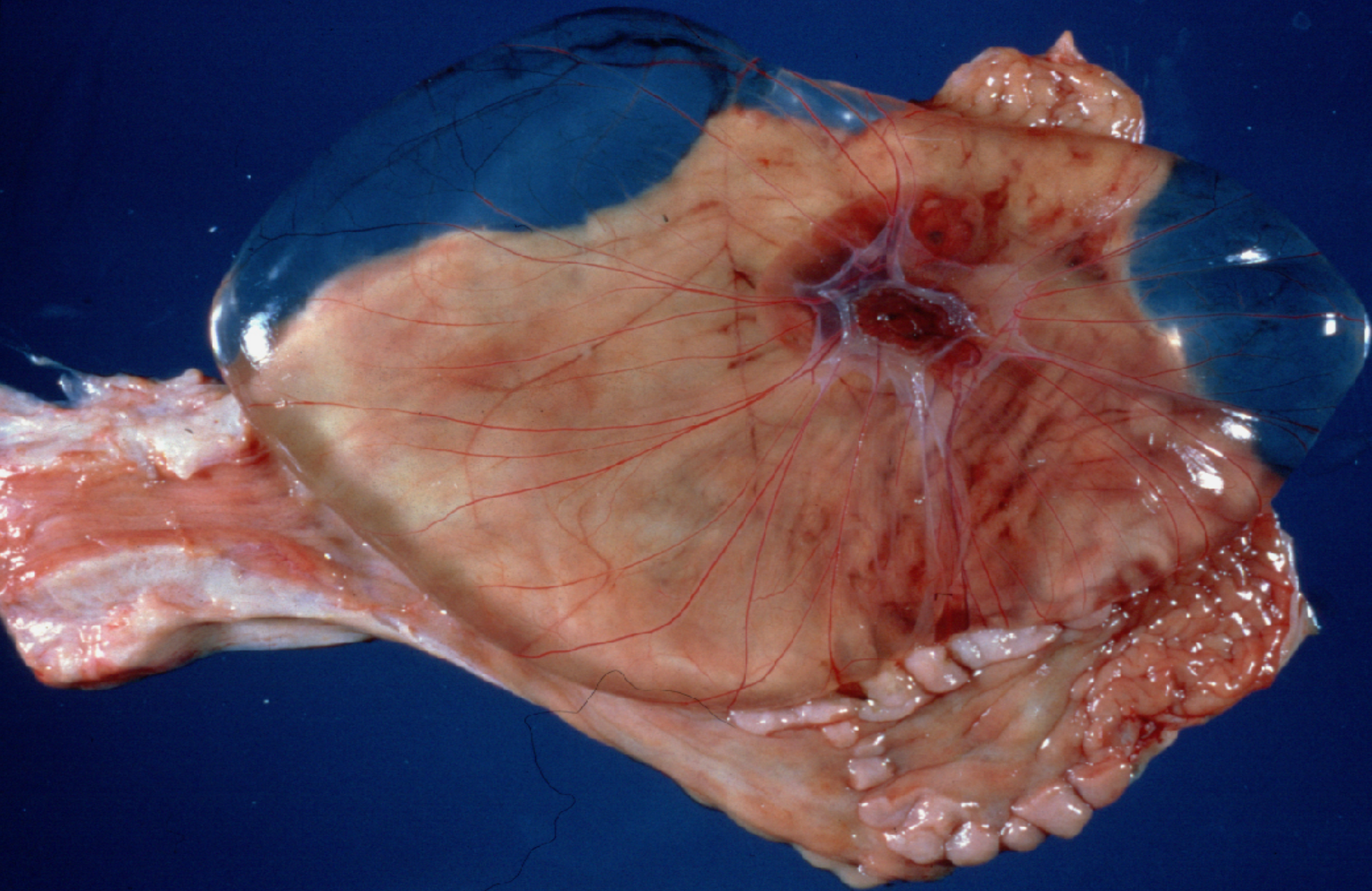
**Sloughed cup free
in uterine lumen**



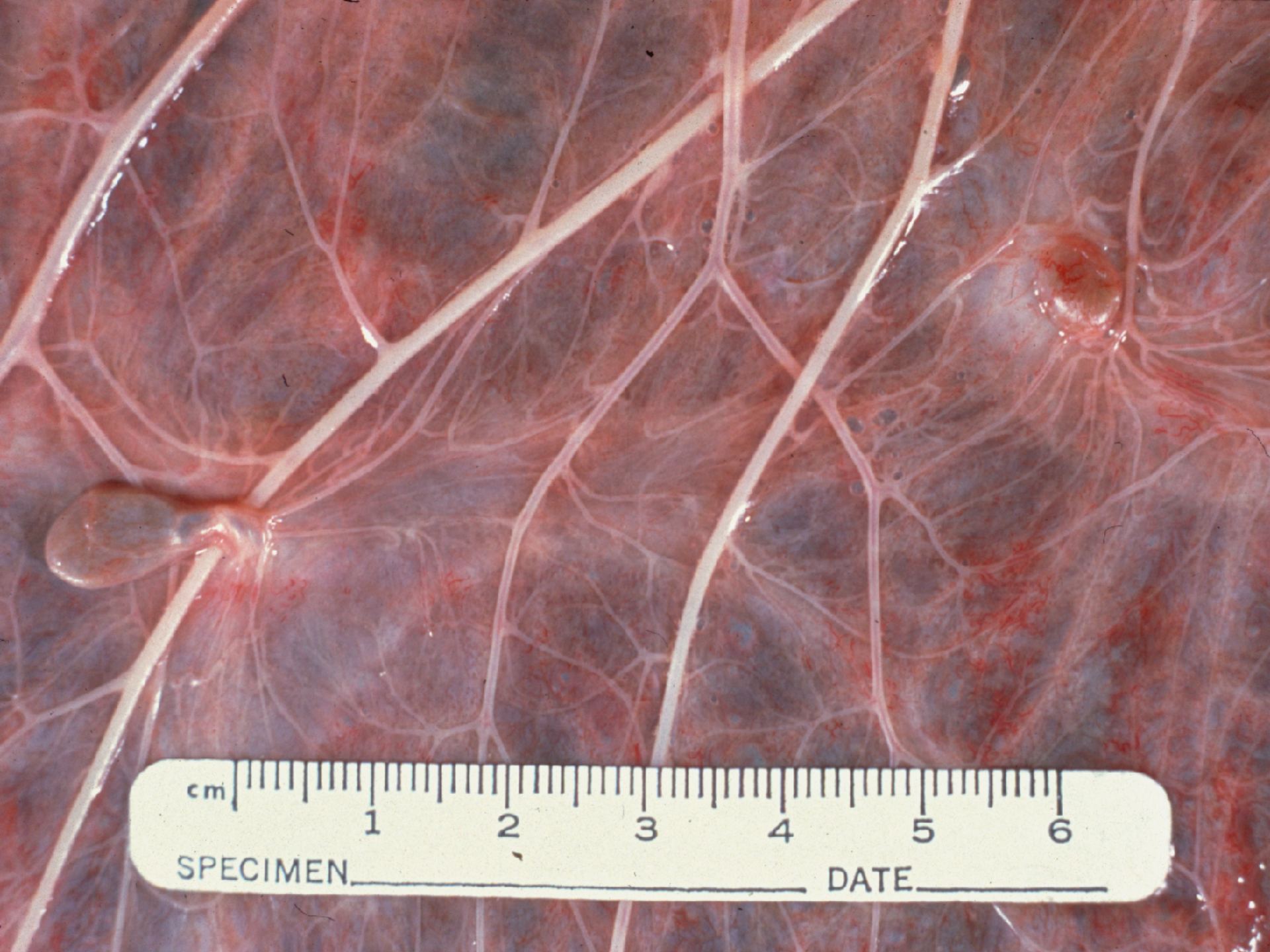
**Sloughed cup enclosed
in allantoic pouch**

-  Trophoblast
-  Chorionic girdle
-  Endometrial epithelium
-  Endometrium
-  Endometrial cup
-  Uterine milk









cm

1

2

3

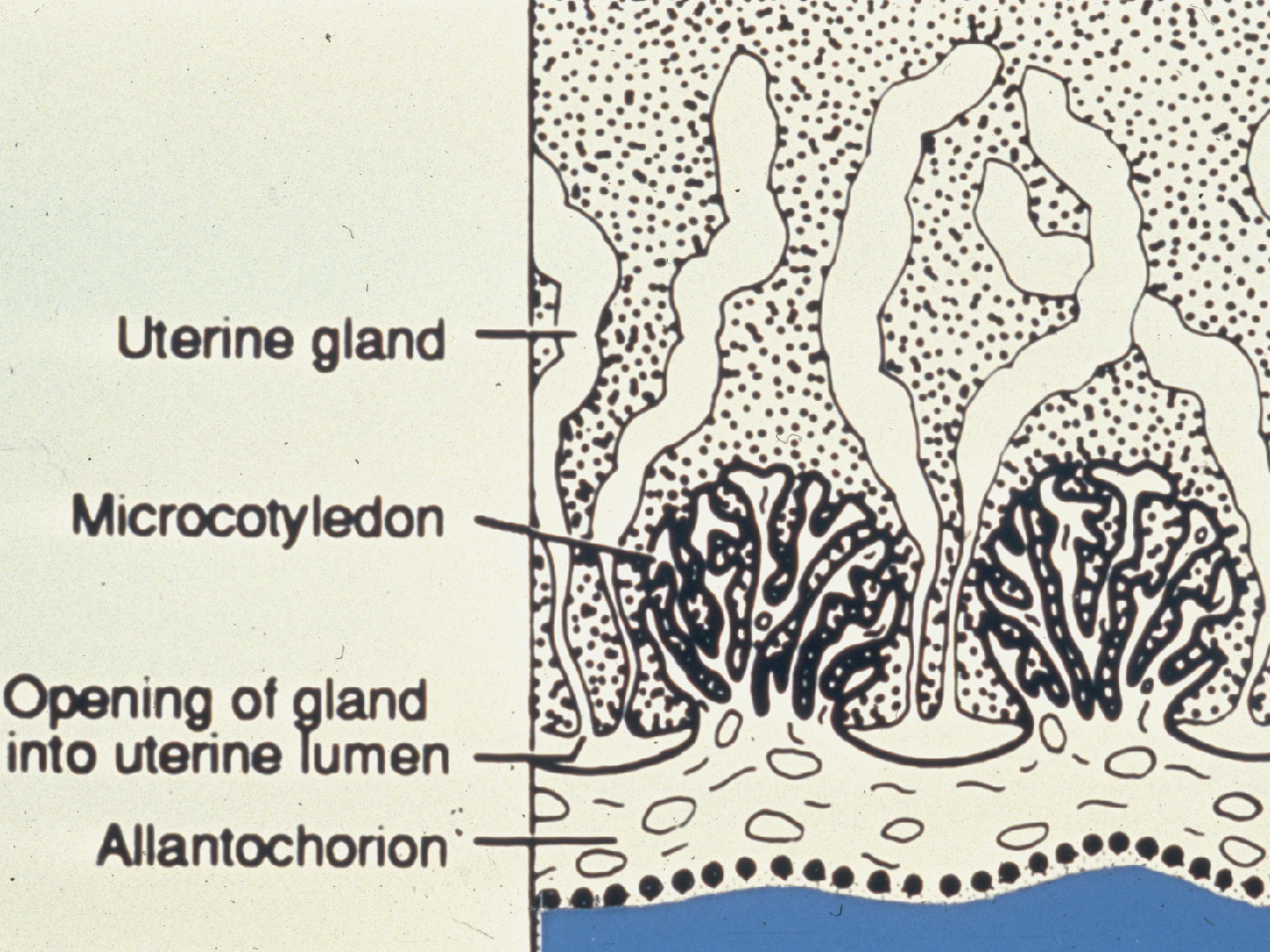
4

5

6

SPECIMEN

DATE

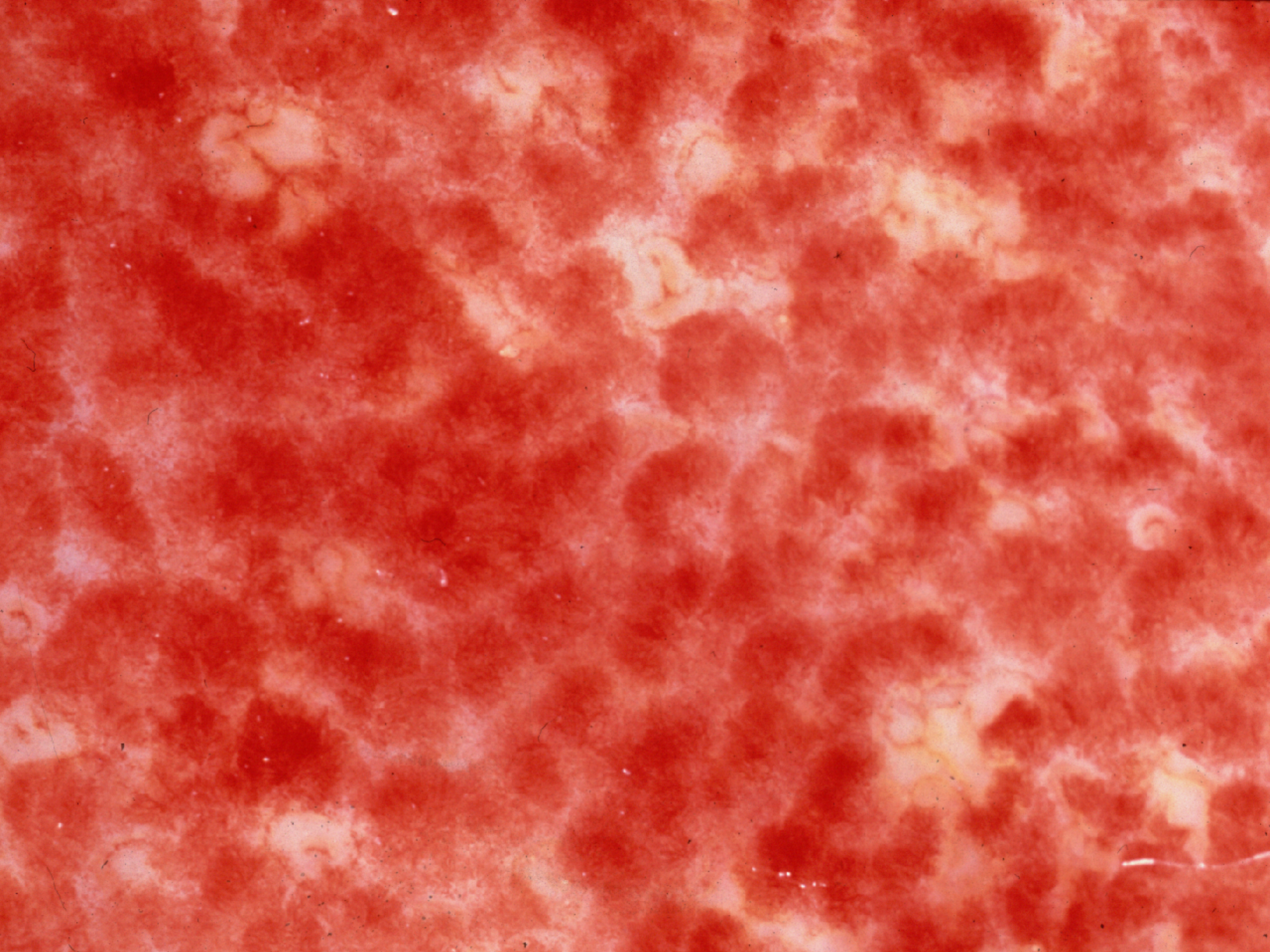


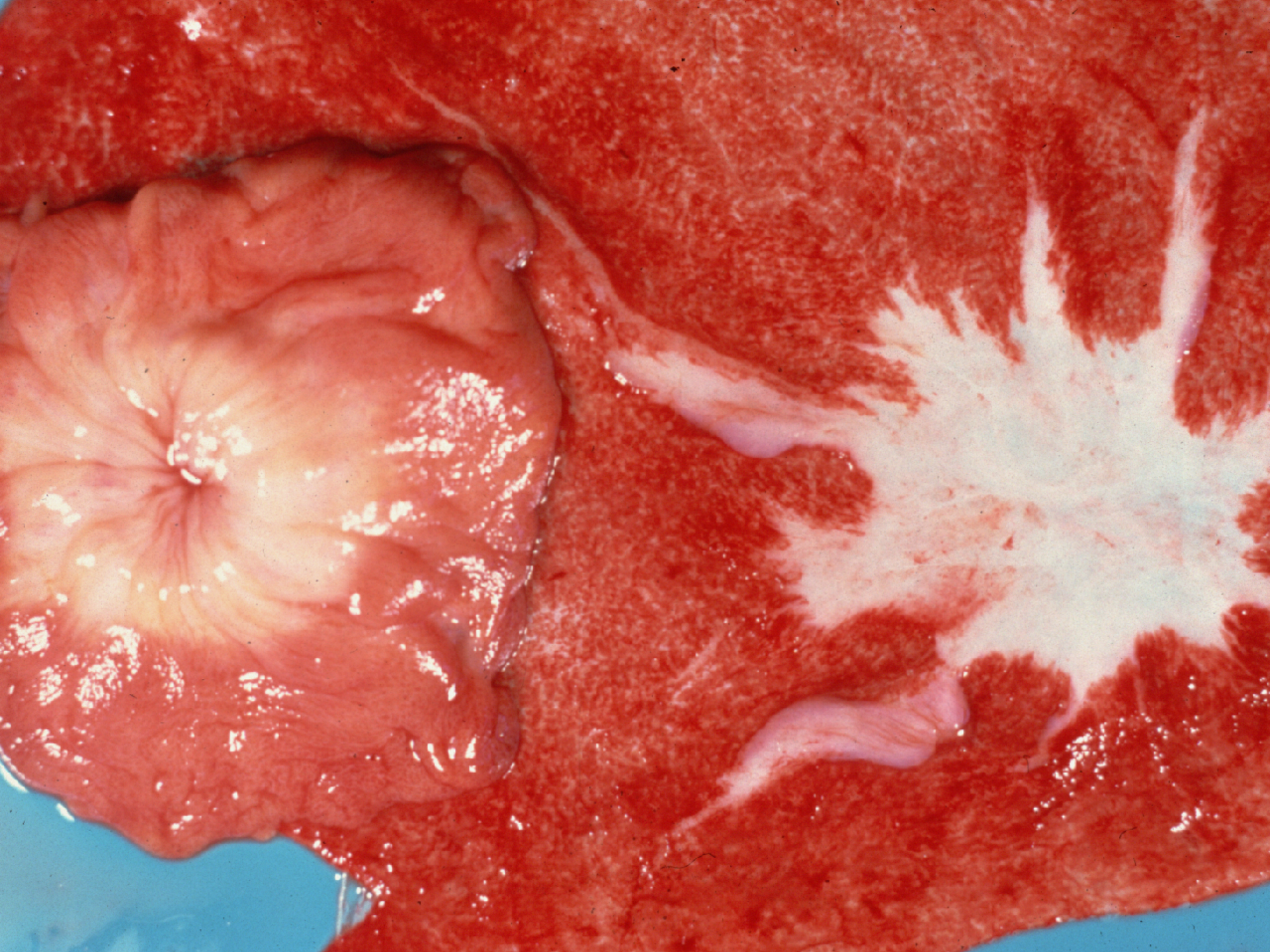
Uterine gland

Microcotyledon

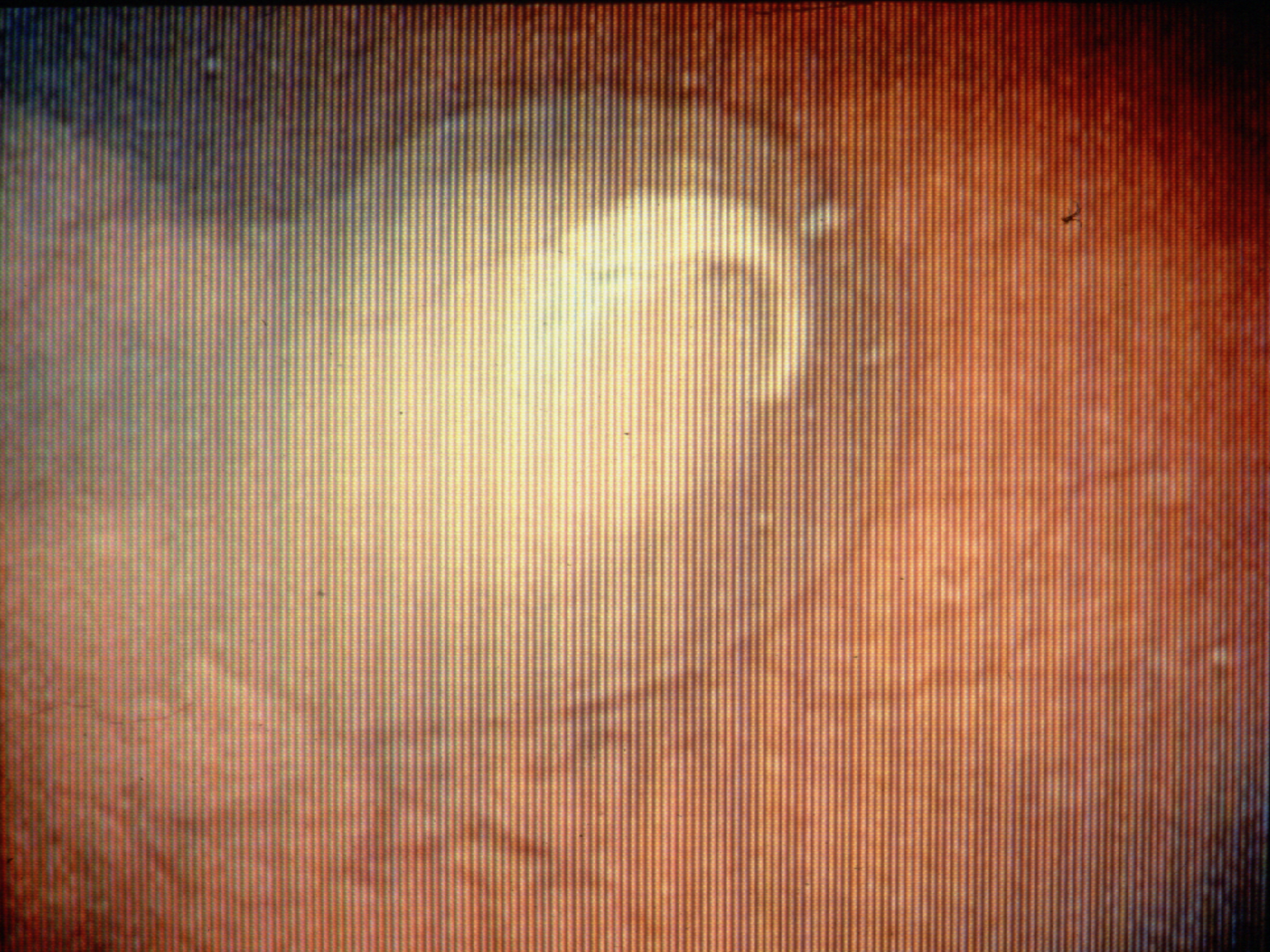
Opening of gland
into uterine lumen

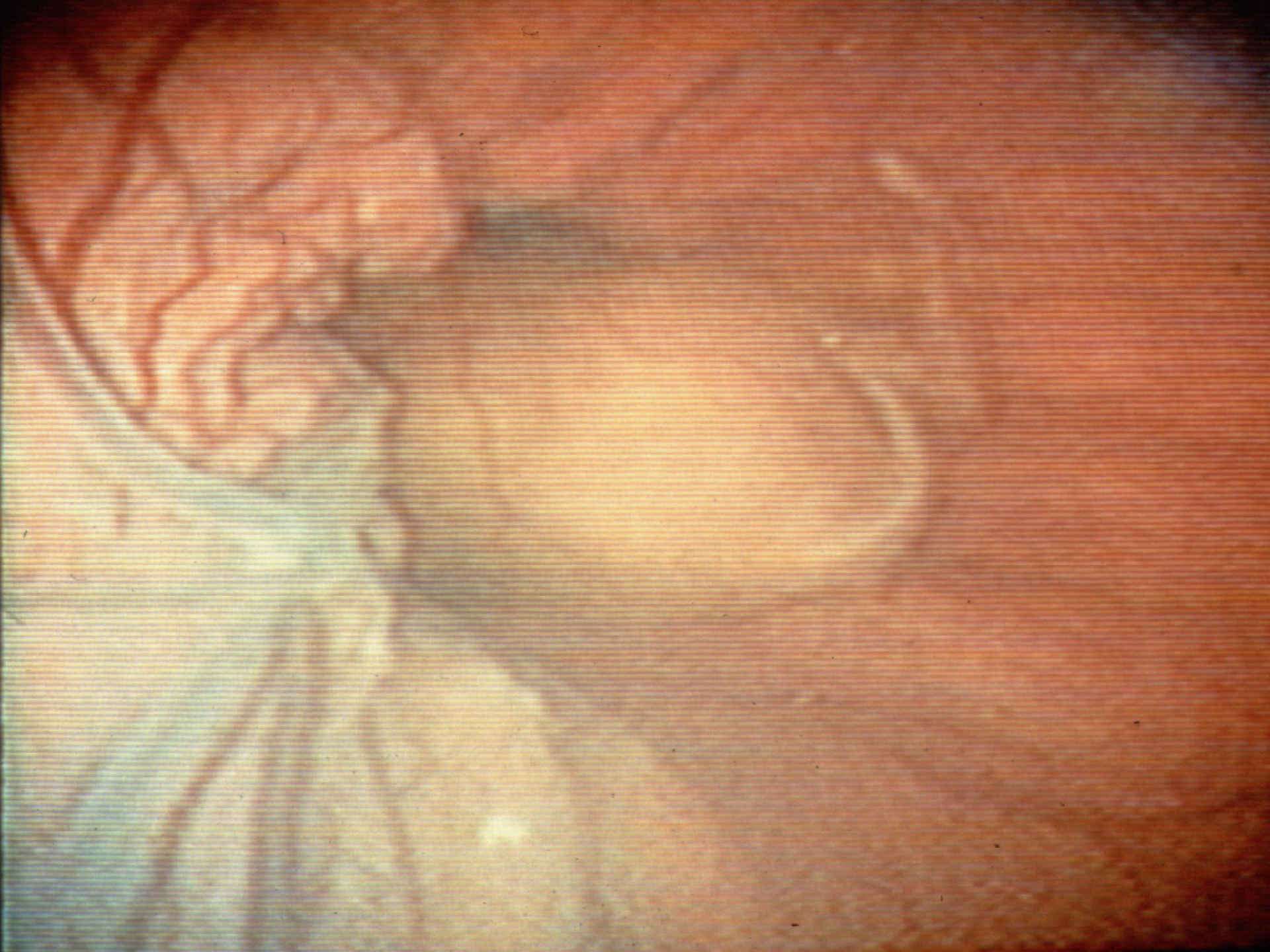
Allantochorion

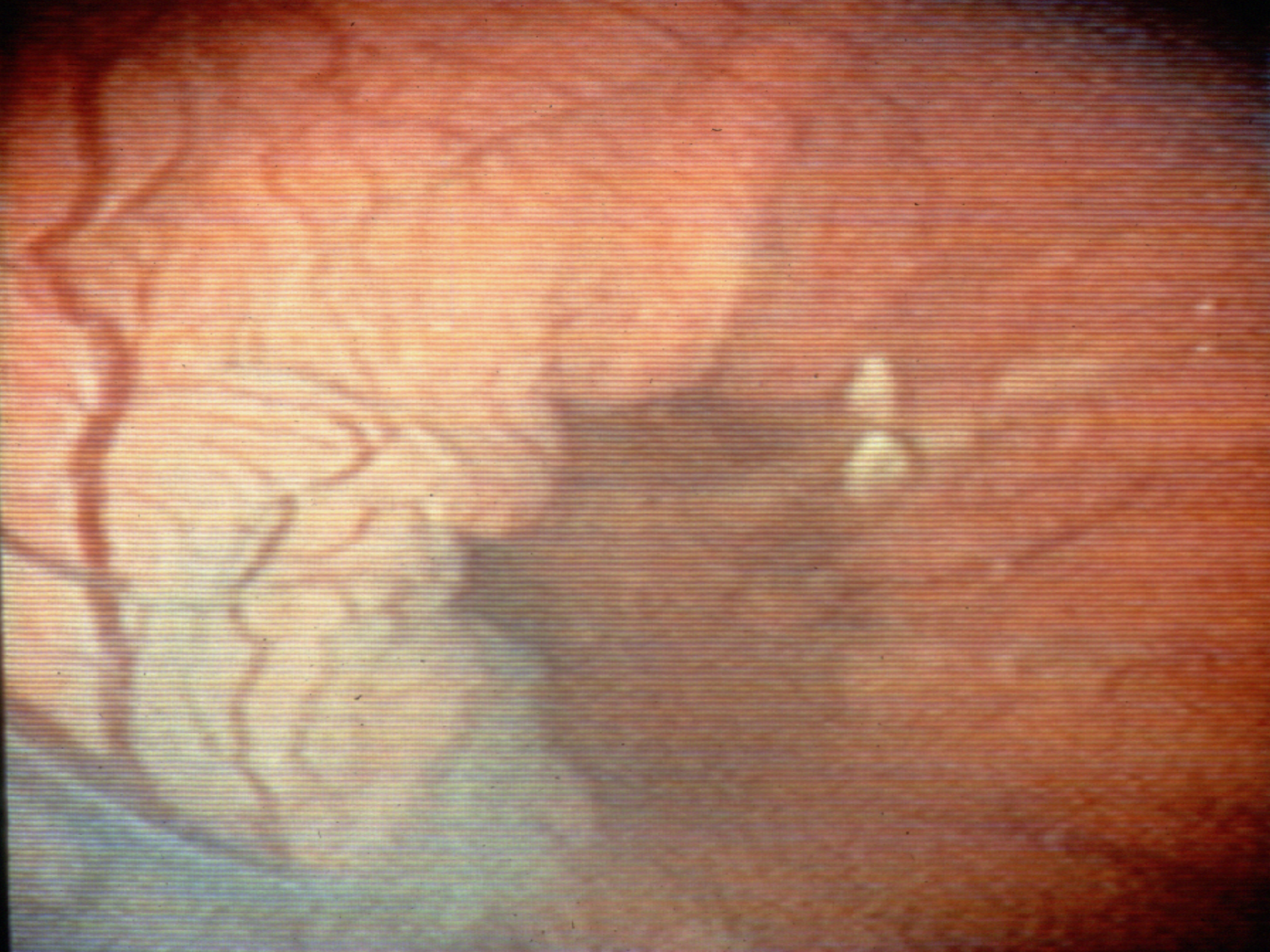












GRAVID UTERUS

UTERUS

FETUS

Hypothalamus and anterior pituitary

ACTH

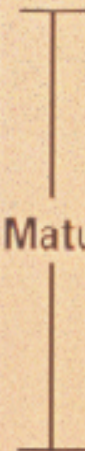
Adrenals

Cortisol

Gonads

FETO-PLACENTAL UNIT

Maturation



CERVIX AND LIGAMENTS

Relaxin

PGE

Estrogens

Progestins

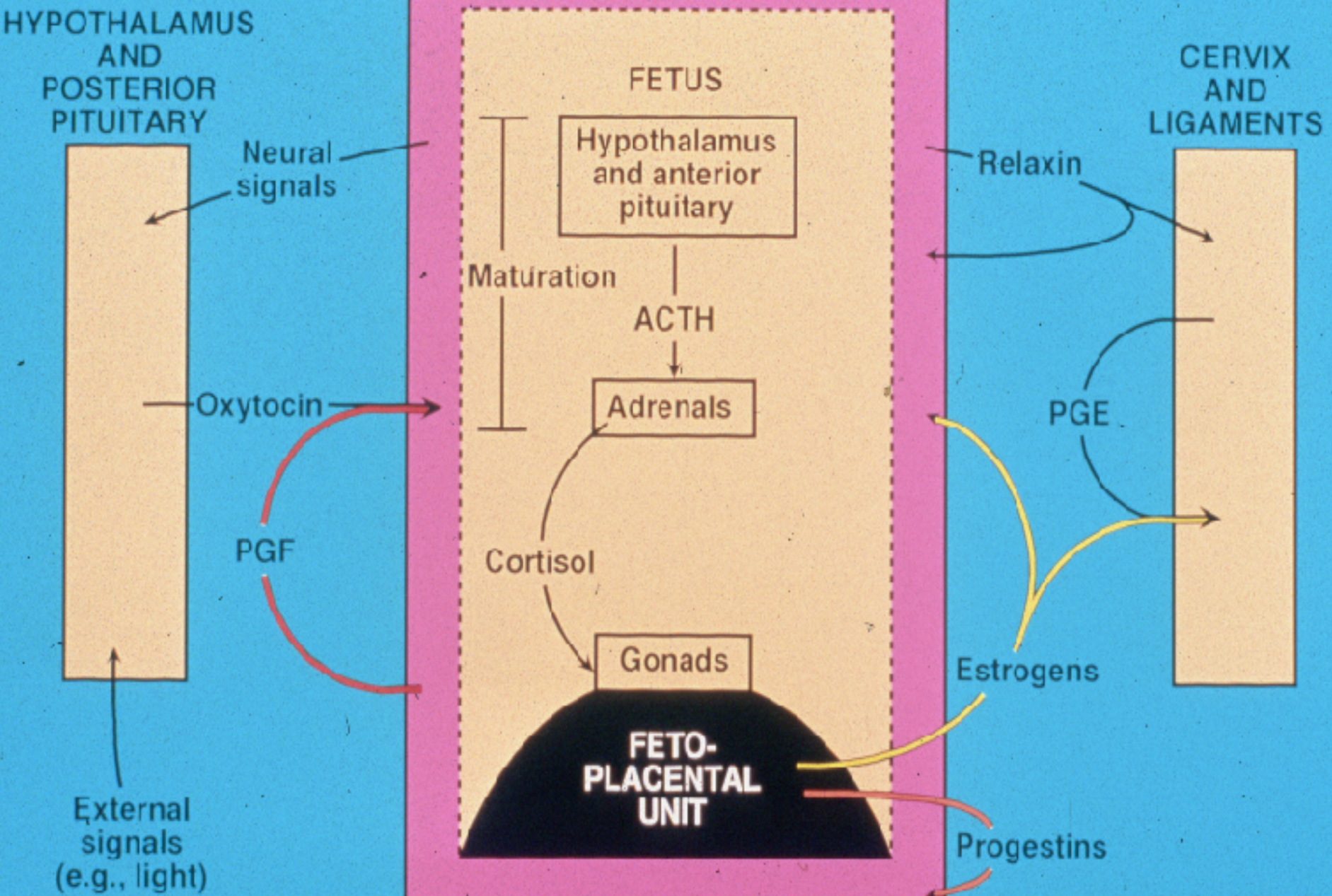
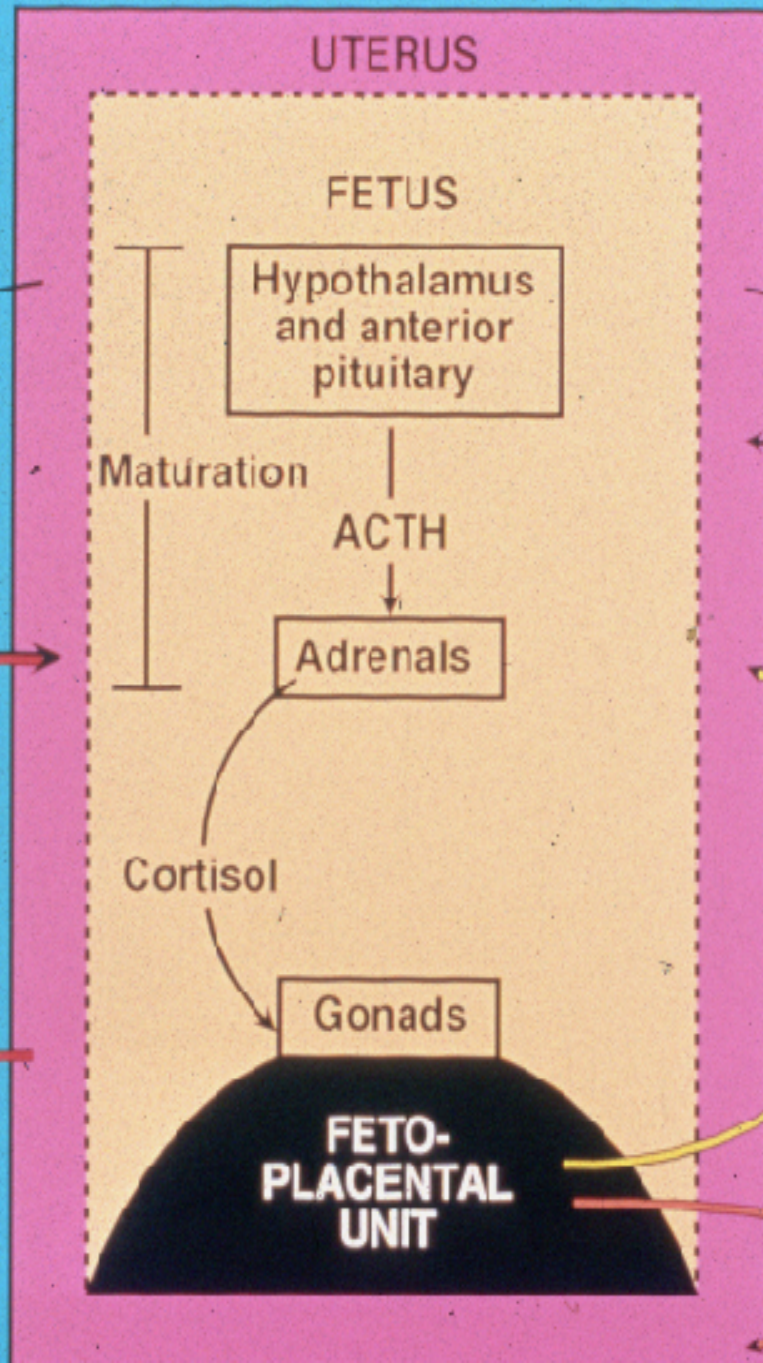
Neural signals

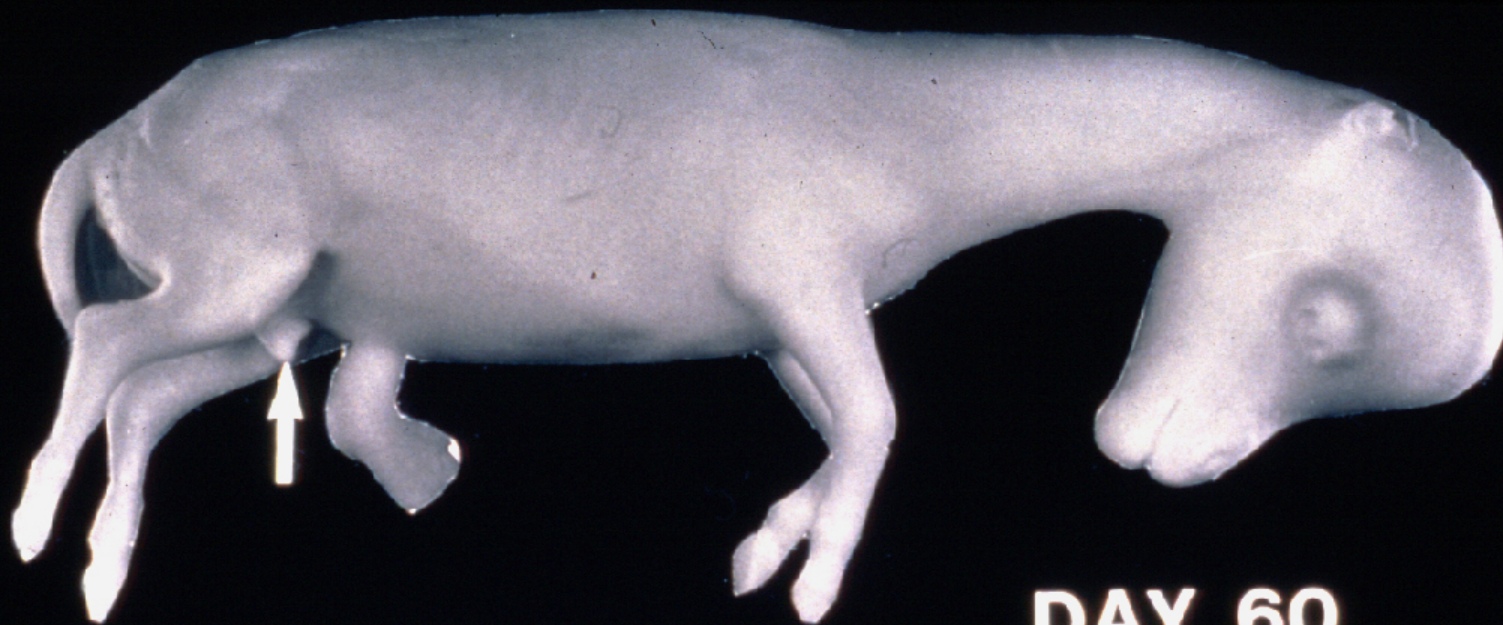
Oxytocin

PGF

HYPOTHALAMUS AND POSTERIOR PITUITARY

External signals (e.g., light)





DAY 60

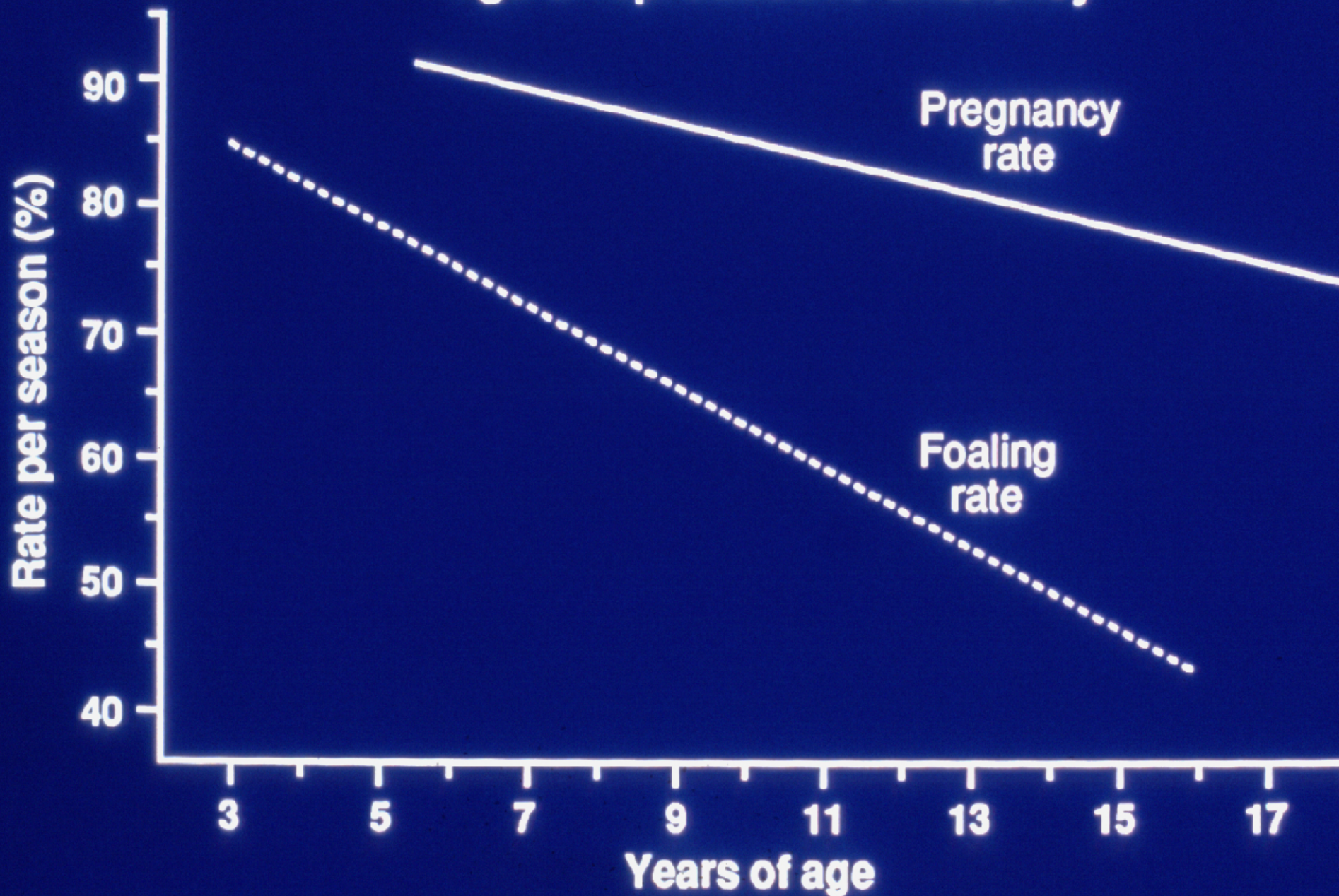


Terminology for describing reproductive efficiency

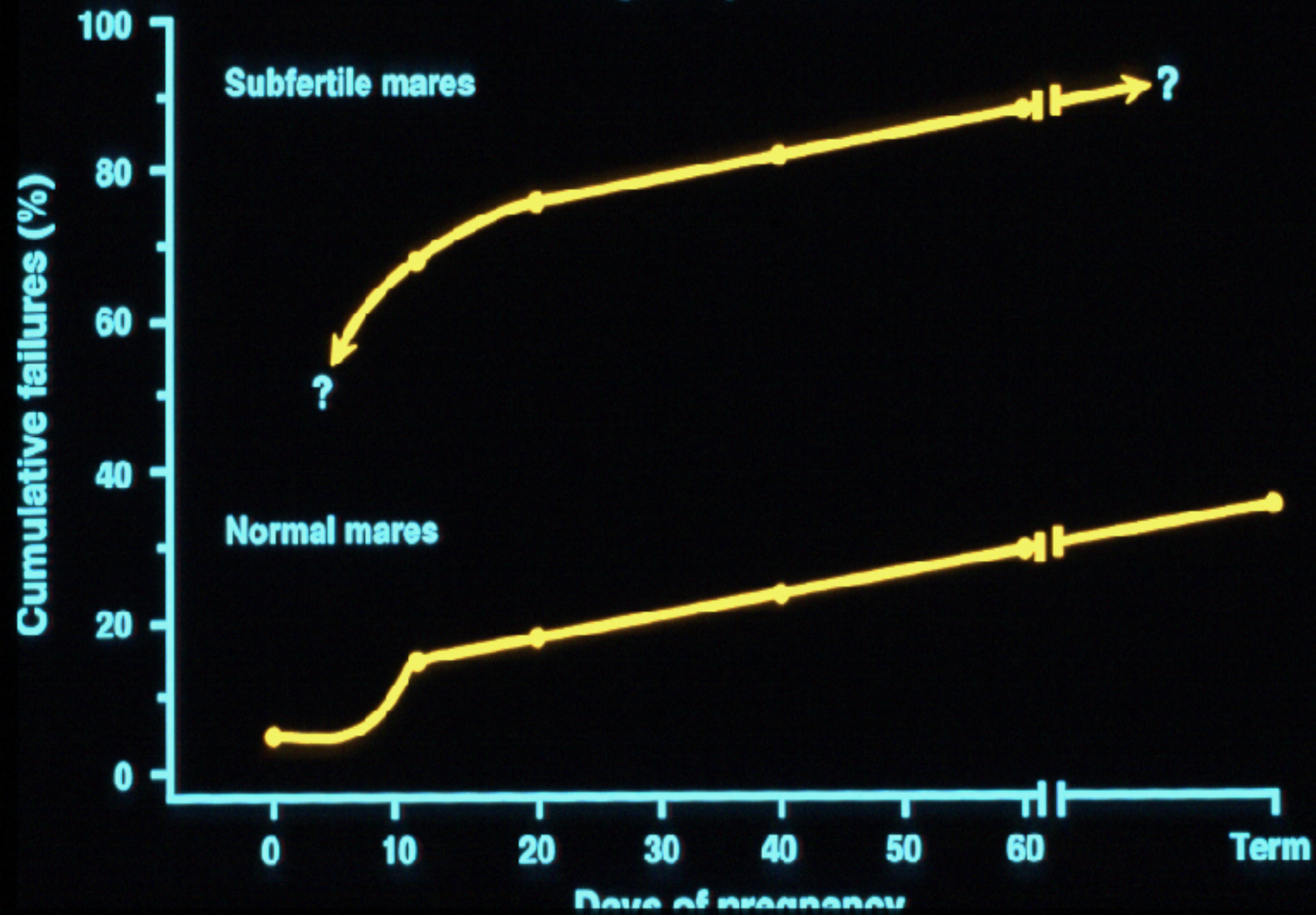
Terminology	Rates (examples)
Fertilization rate	90%
Pregnancy rate per ovulatory period	55%
Pregnancy rate per operational season	85%
Foaling rate per season	80%
Embryo-loss rate	18%
Fetal-loss rate	6%
Pregnancy-loss rate	12%
Stillbirth rate	2%

**Confusing terms: Abortion rate, conception rate,
embryo resorption**

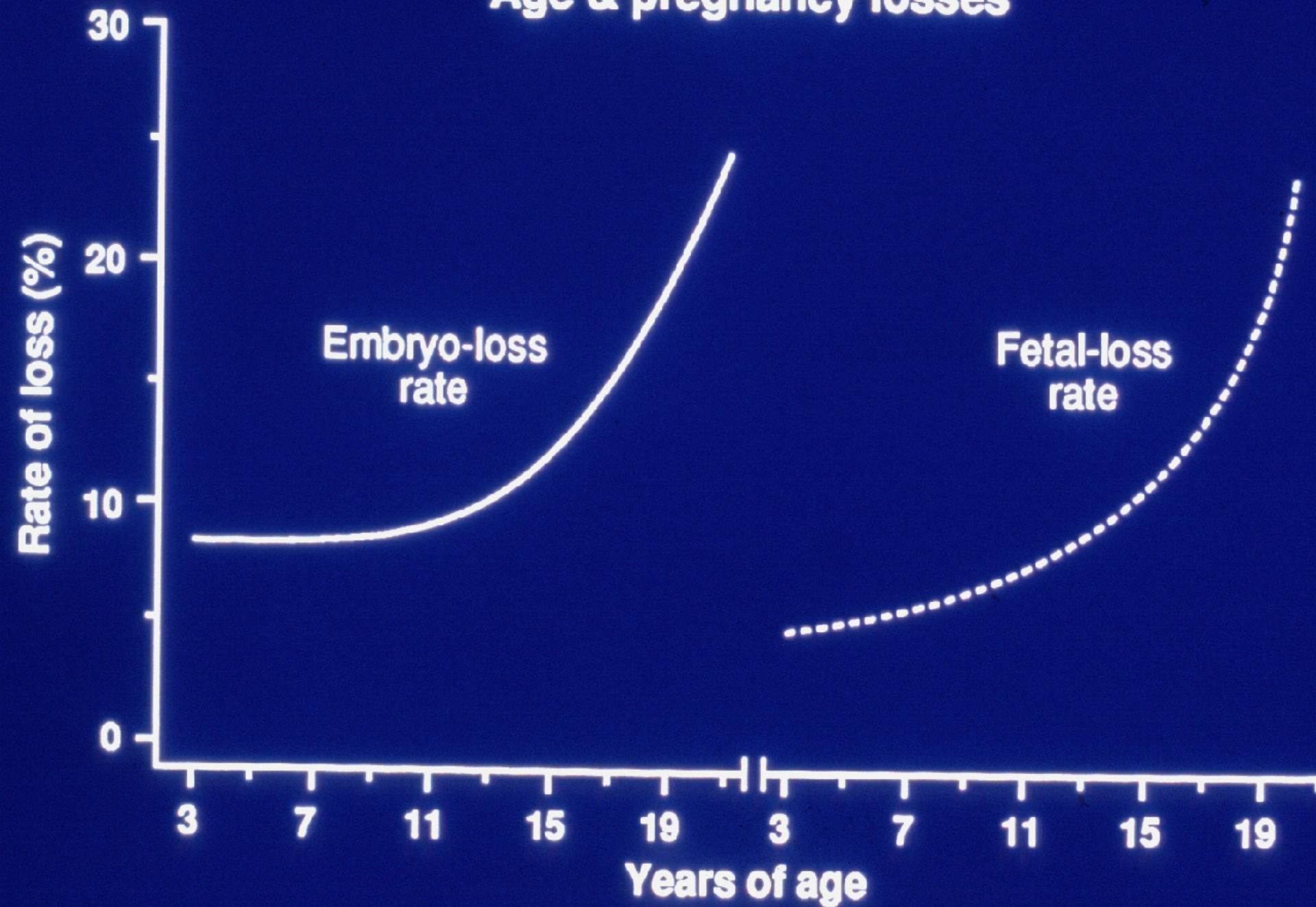
Age & reproductive efficiency



Pregnancy failures



Age & pregnancy losses



Age & pregnancy losses

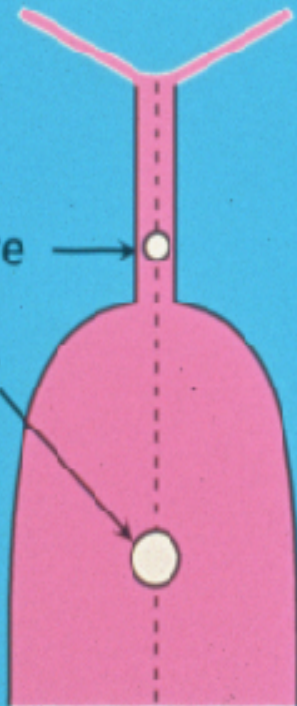


Return to estrus

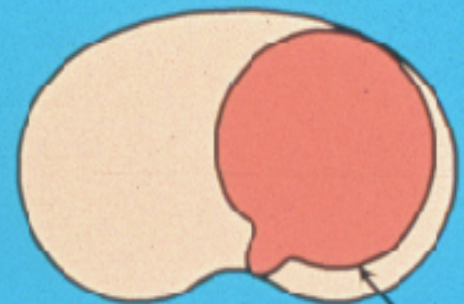


2. Regresses at normal time

1. Dies before blocking luteolysis

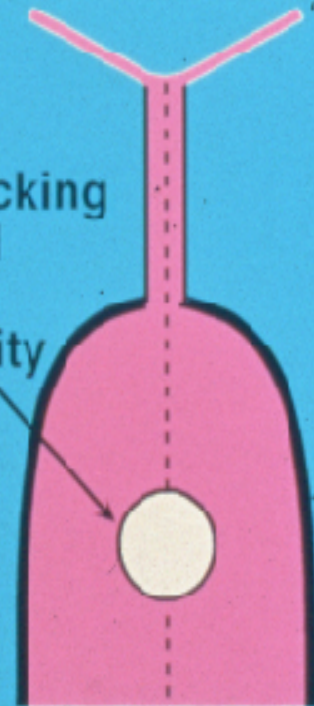


Pseudopregnancy



Maintained

Dies after blocking luteolysis and stimulating uterine turgidity

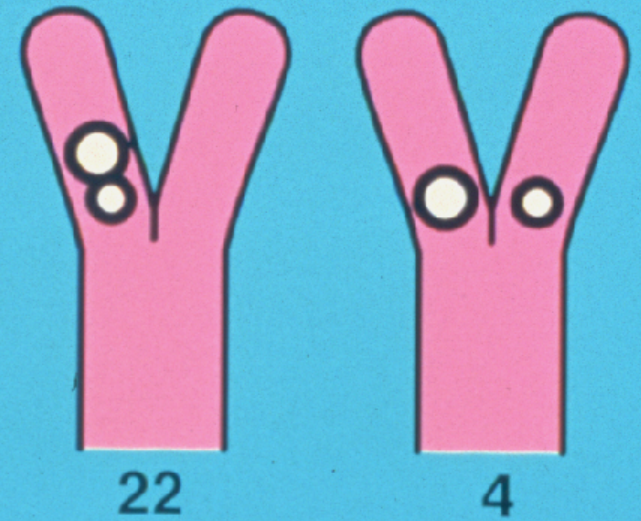
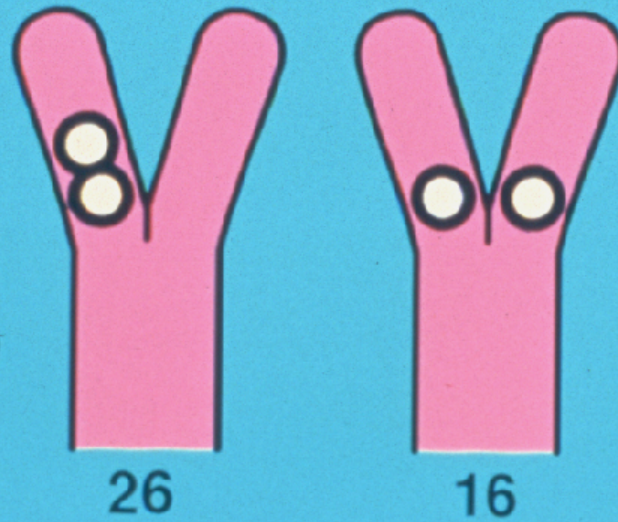


Turgid

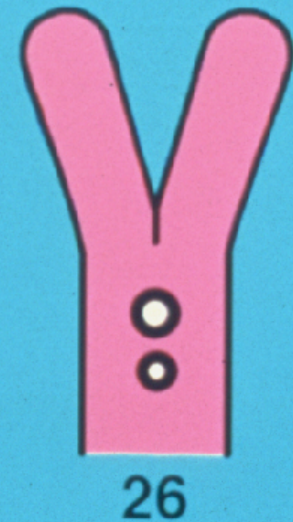
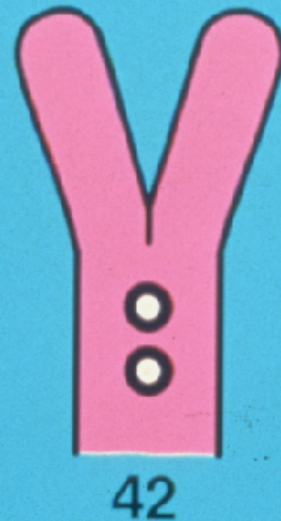
Similar size
(0-3 mm)

Dissimilar size
(≥ 4 mm)

Fixation
(Day 16)



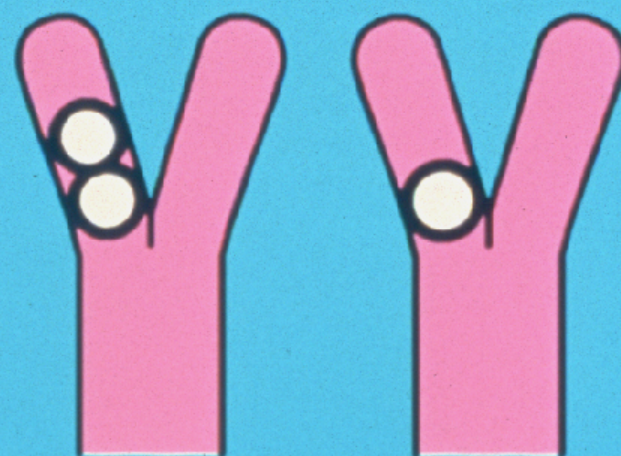
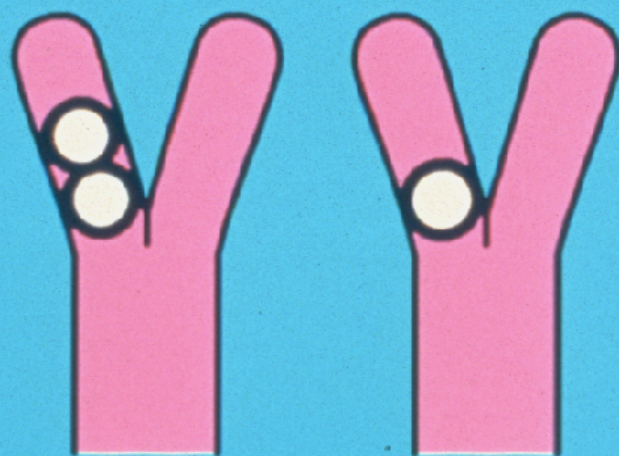
Mobility phase
(Days 11-15)



Similar size
(0-3 mm)

Dissimilar size
(≥ 4 mm)

Day 40



7

19

0

22

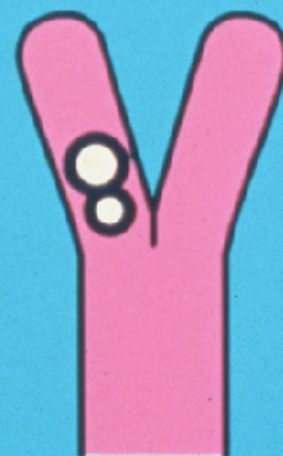
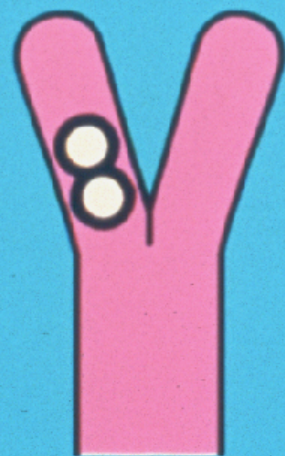
27%

73%

0%

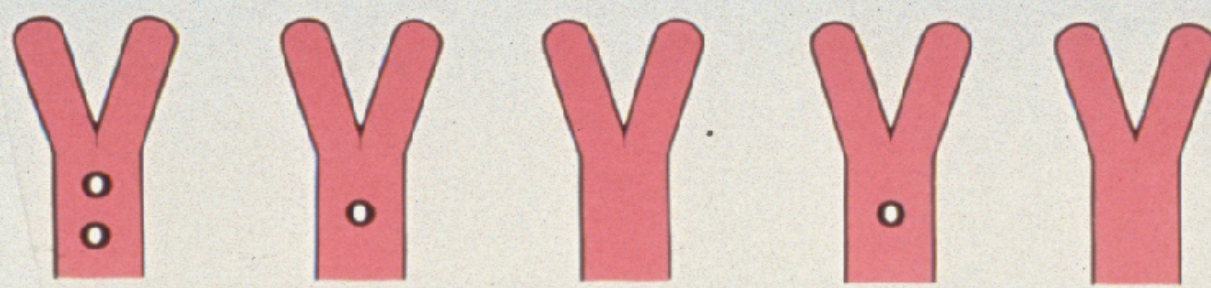
100%

Day 16

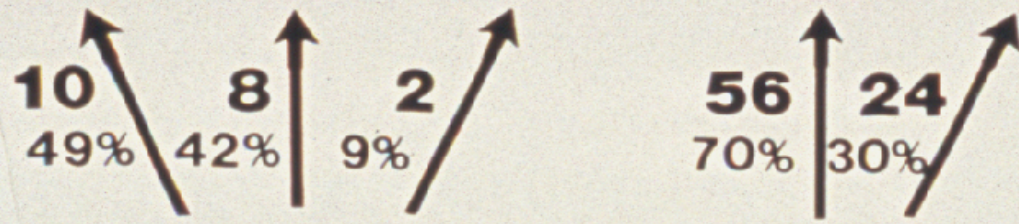


26

22



DAYS 11-15
Maximum mobility phase



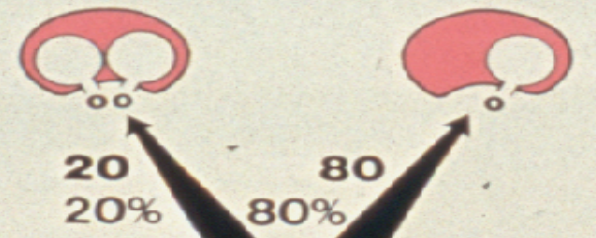
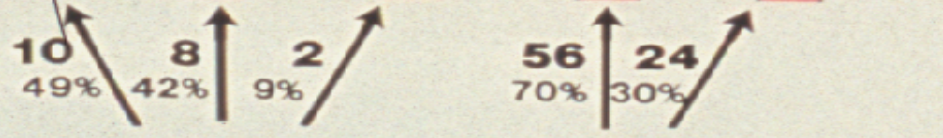
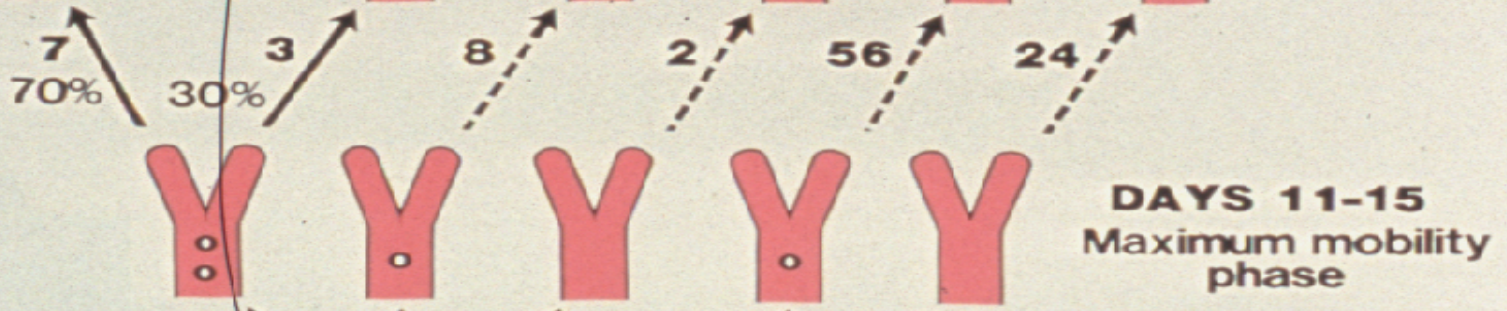
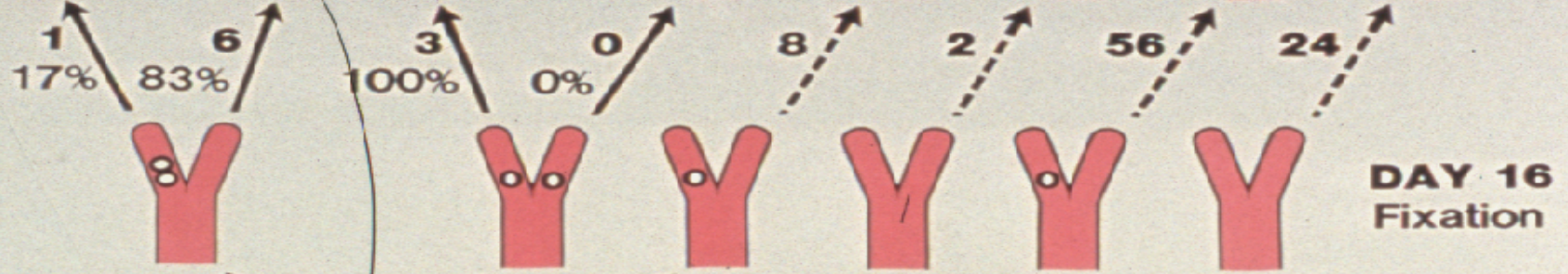
DAY 0
Ovulation



100
100%

Bred mares

Principles
of probability



100
100%

20
20%

80
80%

56
70%

24
30%

10
49%

8
42%

2
9%

7
70%

3
30%

8

2

56

24

1
17%

6
83%

3
100%

0
0%

8

2

56

24

Principles
of probability