



NATIONAL  
ABORTION  
FEDERATION

# The Basics of First-Trimester Surgical Abortion Workshop





# Tissue Examination



## Why Examine the Products of Conception?



## Examination of Pregnancy Tissue

- Assures that the pregnancy was successfully removed
- Confirms your estimation of the stage of pregnancy
- May provide evidence of abnormal pregnancy

## What support is there for examining the products of conception?

- Randomized controlled trials? No
- Other research studies? Very few specific to examination of POC
- Recommendations of professional organizations? NAF, RCOG, ACOG, SOGC
- Trusted experts
- Personal experience

# Evaluation of Evacuated Uterine Contents

Policy Statement: Complete removal and identification of products of conception help prevent complications of abortion.

## Standard 1

Evacuated uterine contents must be examined before the woman leaves the facility.

## Recommendations

- **Recommendation 1.1:** In first trimester terminations, flotation of tissue with backlighting should be used to identify products of conception, including gestational sac
  - **Option 1.11:** Pathological examination of evacuated uterine contents may be performed.



## Society Of Obstetricians and Gynaecologists Of Canada

In their recently published guidelines they state that “gross examination of all tissue should be made during or at the end of the procedure. If there are no recognizable fetal parts or placenta, the tissue should be floated in a clear dish over a light source.”

# Royal College of Obstetricians and Gynaecologists

Evidence-based guidelines remain silent on the use of examination of the products of conception except within the protocol for early pregnancy termination below 7 weeks.

## ***A Clinician's Guide to Medical and Surgical Abortion***

The textbook suggests examination of the POC is an integral part of surgical abortion and has numerous benefits. It particularly supports the use of tissue examination for the presence of villi when dealing with abnormal pregnancies and for appropriate fetal parts in second trimester abortions.



**What are the steps to examining the pregnancy tissue removed?**

## Tissue Examination

- Strain the aspirate
- Float the specimen in water
- Use backlighting

### Equipment needed:

- Strainer
- Running water to rinse off blood and clots
- Shallow clear glass or plastic bowl (dish)
- Light sources (electricity or batteries)



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**Place and float in clear container with water**

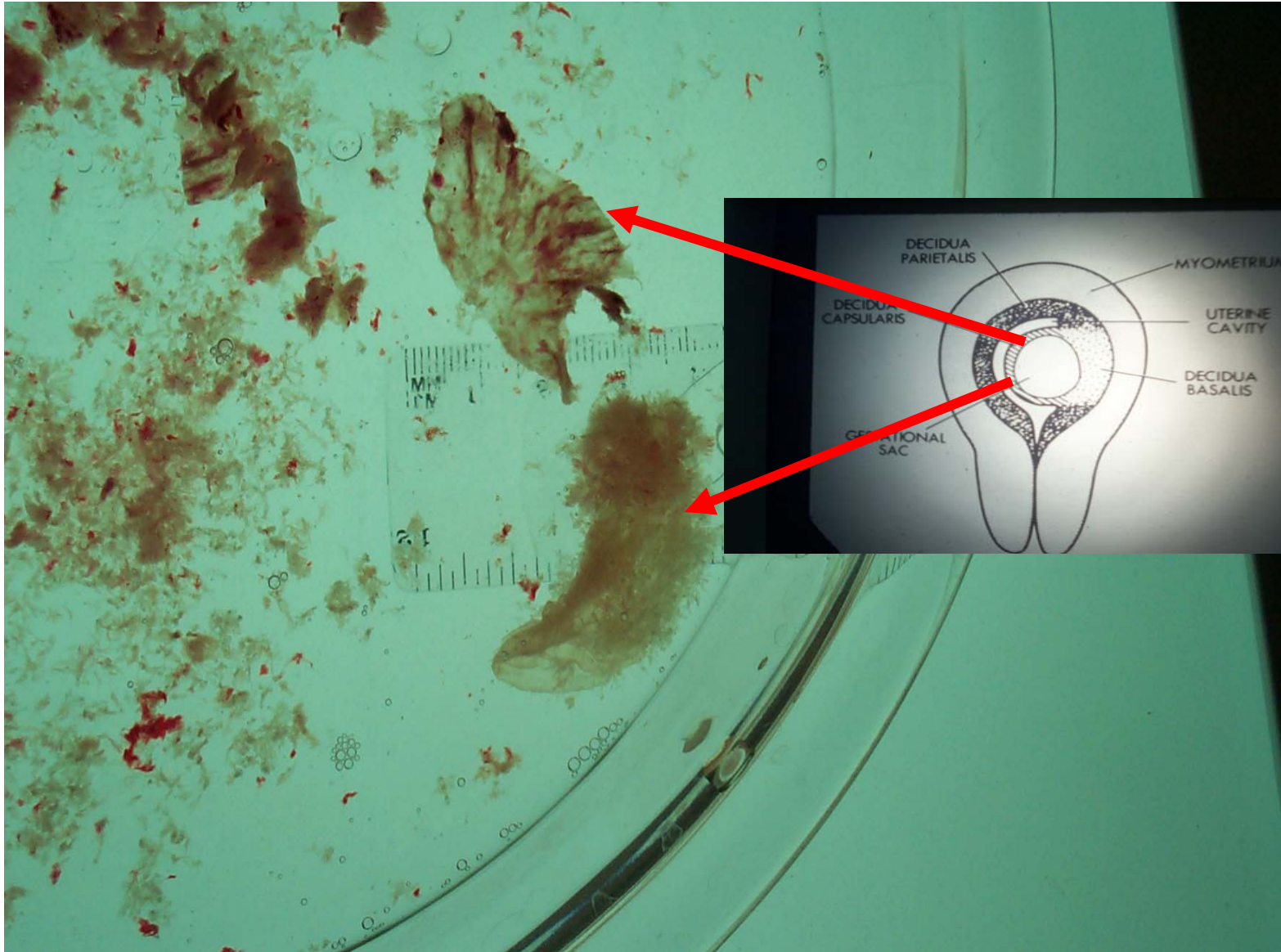




# Basic Components of Products of Conception

- Endometrium: decidua
- Sac: with villi, cord
- Fetus: embryo or fetal parts

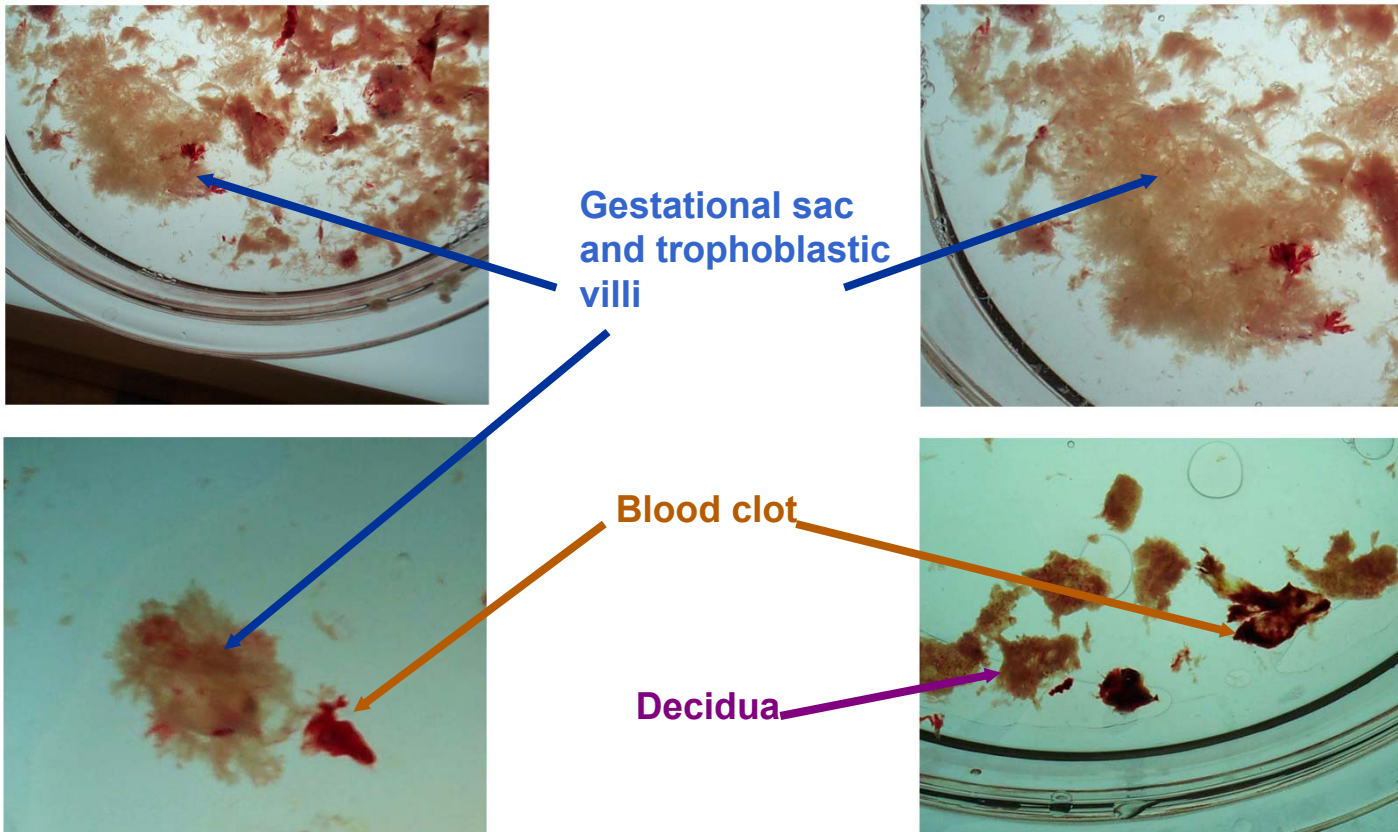
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# Tissue Examination

## Visual Inspection of the Products of Conception



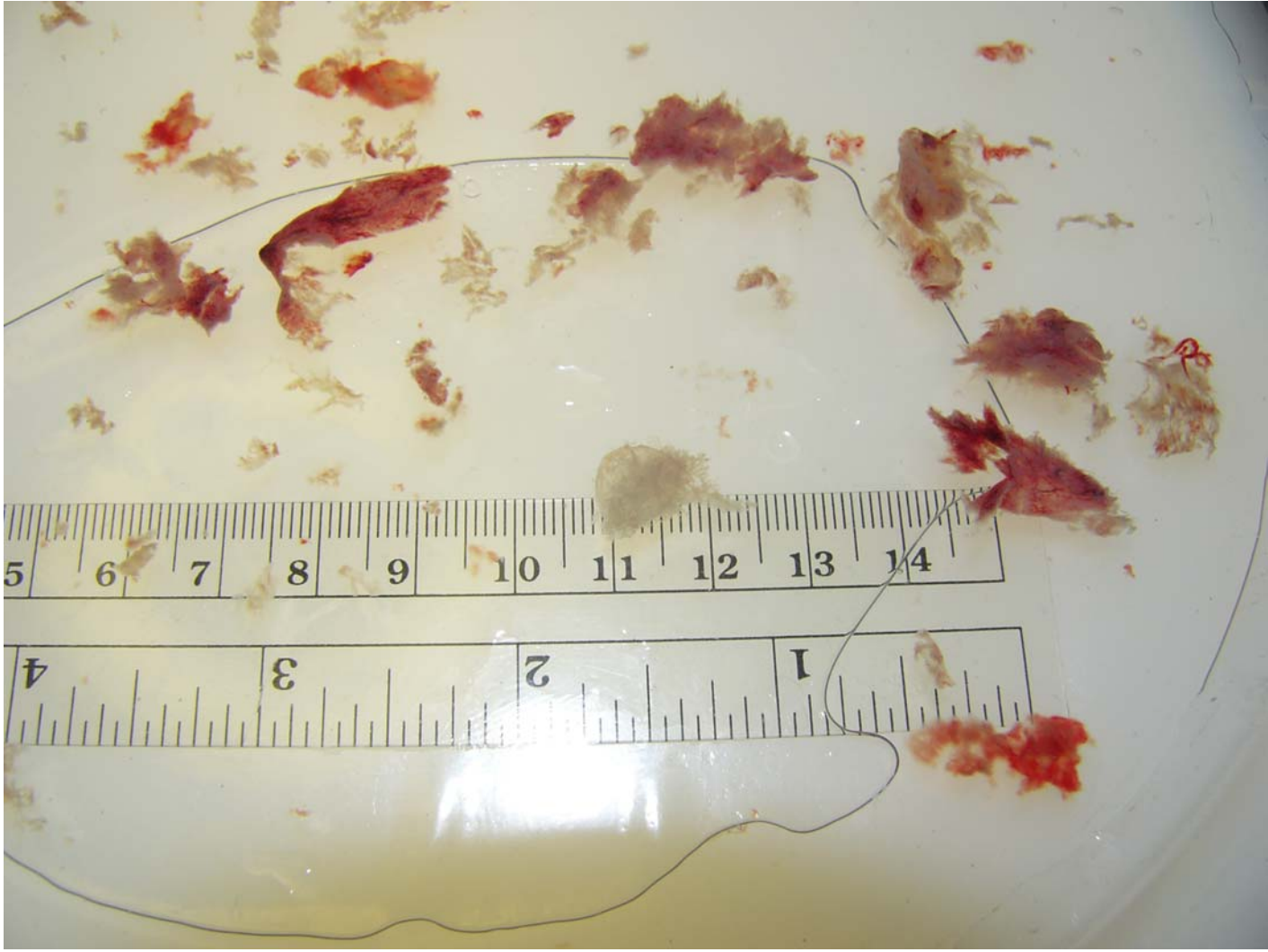


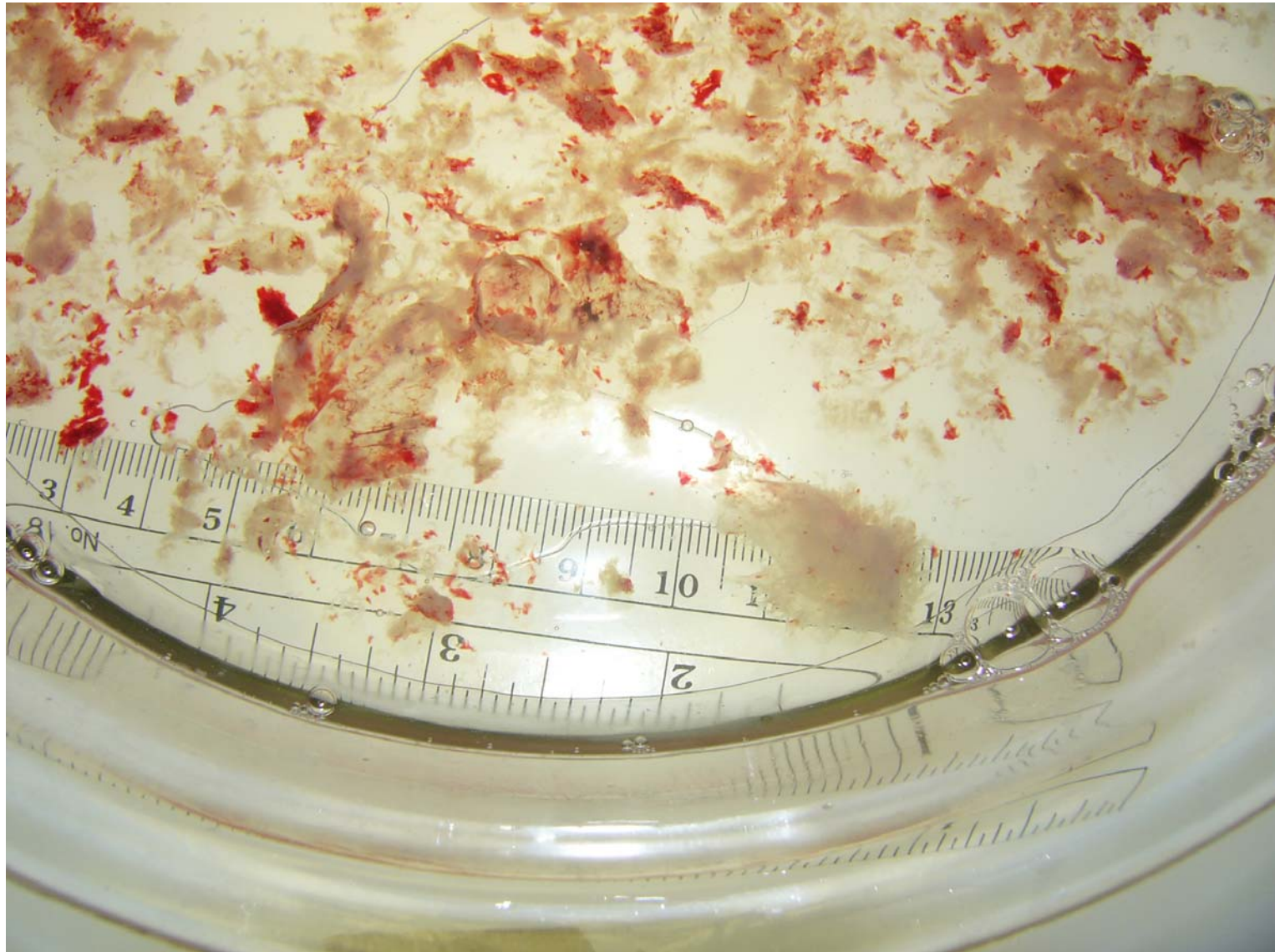
**Understanding what tissue to expect at various gestational ages will help in determining when you have successfully emptied the uterus.**

## Recognizable Tissue at 3–7 Weeks

- Trophoblastic villi (“cottony,” fluffy, white, and nearly transparent)
- Capsule (thicker and more opaque)
- Decidua (maternal endometrium—amount and appearance quite variable)
- No embryo

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## 7-Week Pregnancy



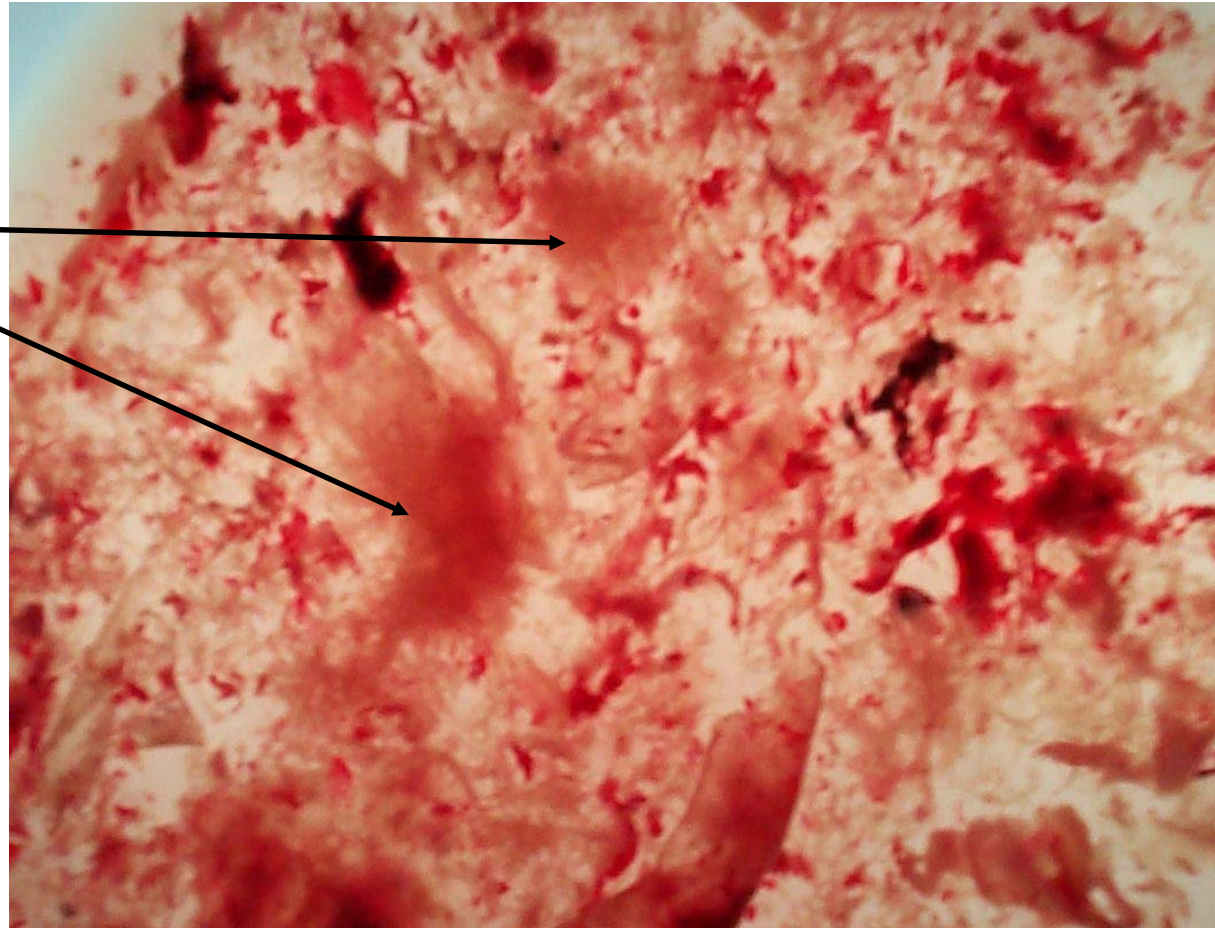


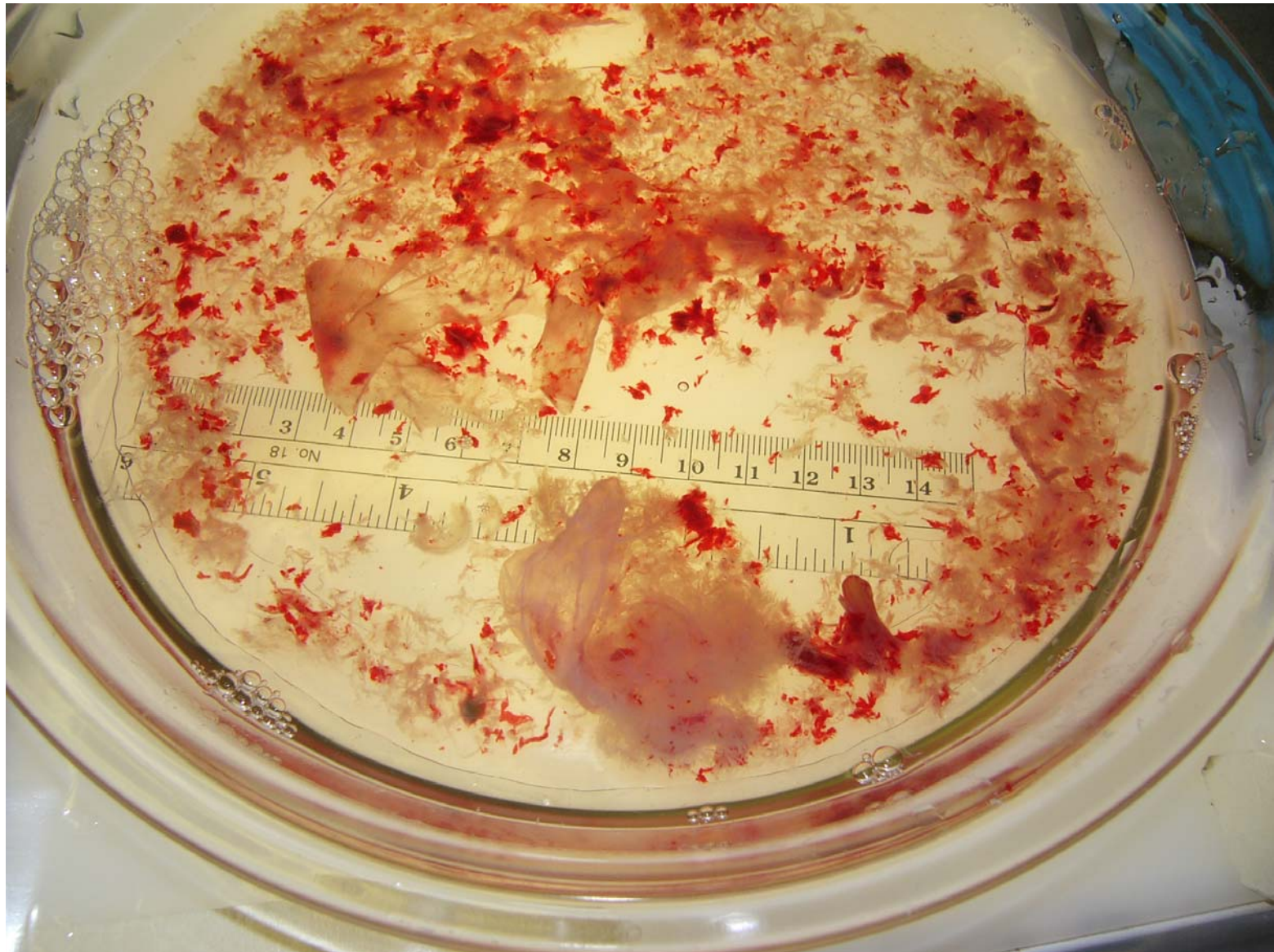
## Recognizable Tissue at 8 Weeks' Gestation

- Gestational sac with villi and cord (vessels pale)
- Capsule
- Decidua, variable amount and appearance
- May see fetal parts, digits will still be webbed

## 8-Week Pregnancy

Trophoblastic  
Villi



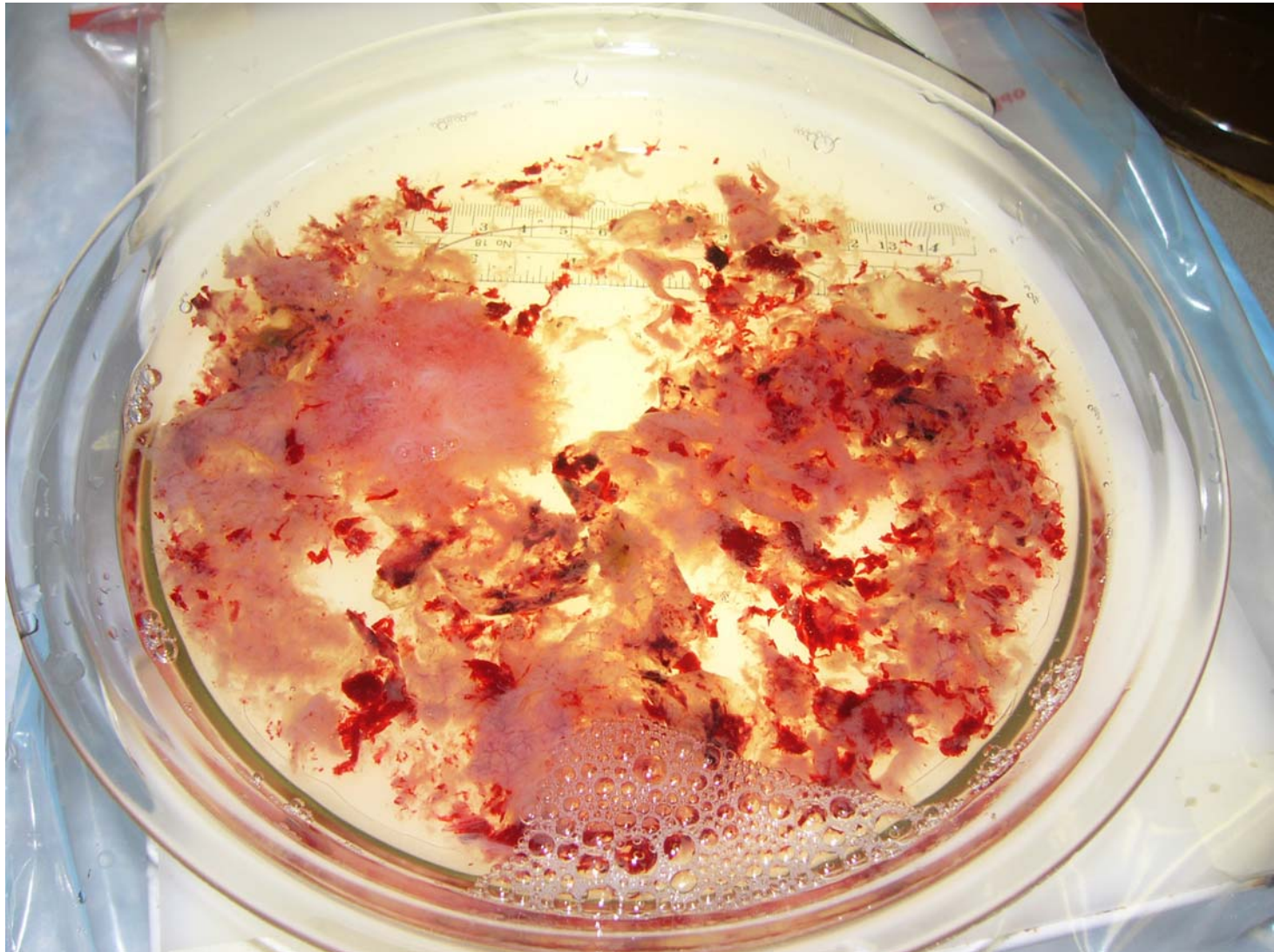




## Recognizable Tissue at 9 Weeks

- Gestational sac with villi and cord (vessels becoming more prominent)
- Fragmented or intact fetal parts, including elbows and knees, digits no longer webbed
- Capsule
- Decidua—variable amount and appearance

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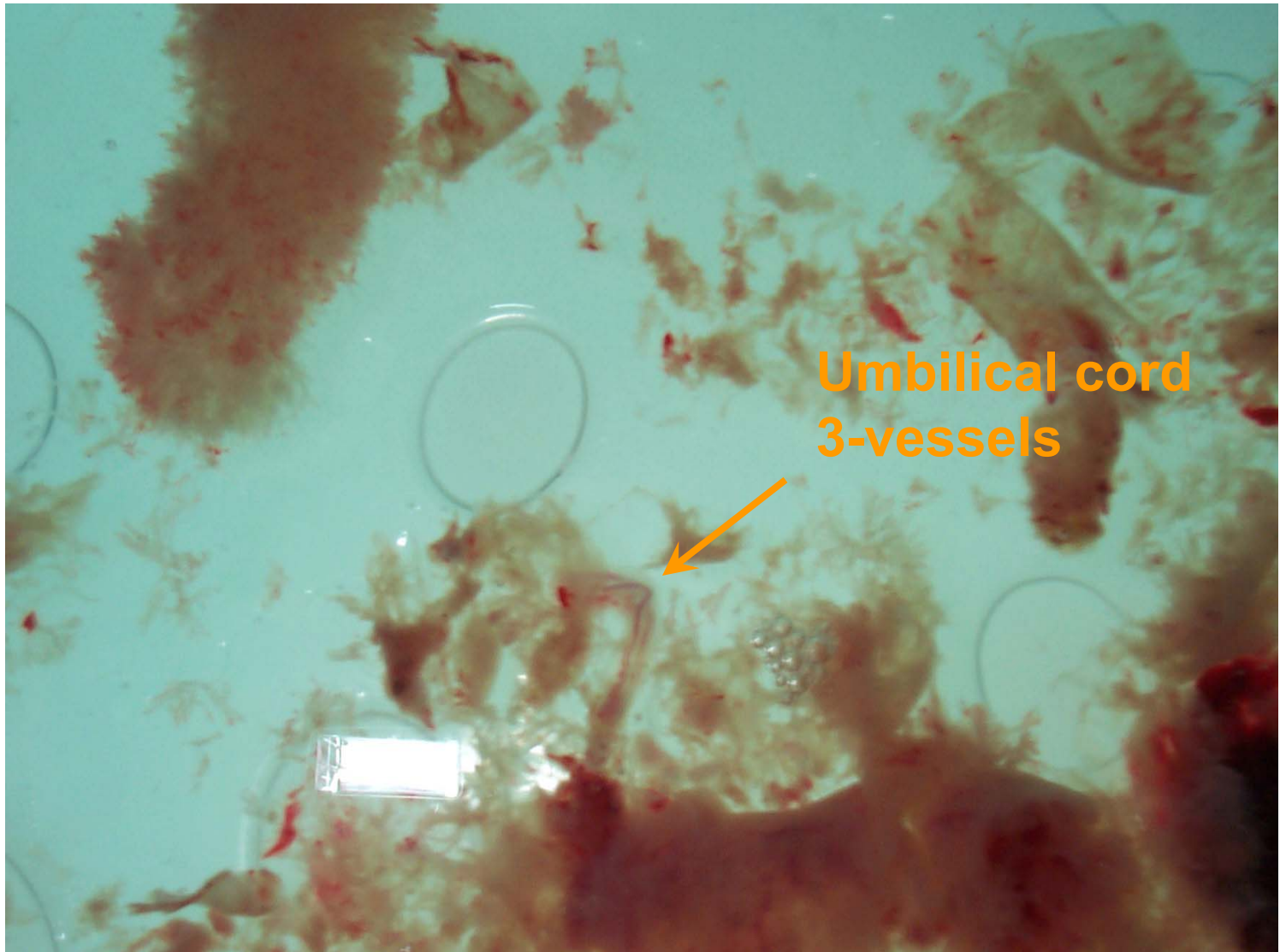






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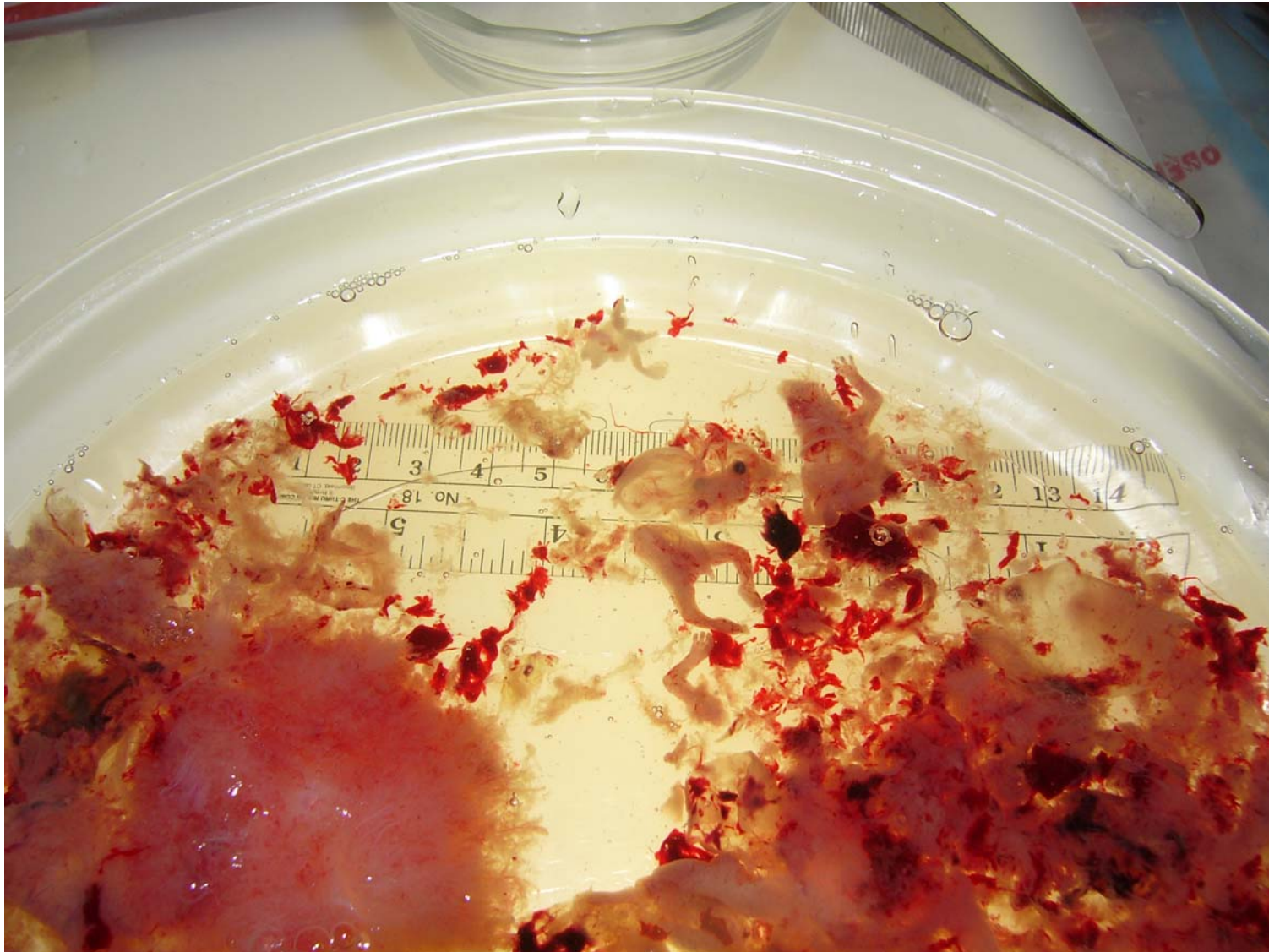
## Recognizable Tissue at 10–12 Weeks

- Gestational sac with villi and cord
- Decidua
- Capsule
- Fetus—at this point you should see all 4 limbs and other skeletal and somatic parts (ribs, vertebrae, calvarium, intestine, heart, eye spots, etc.)

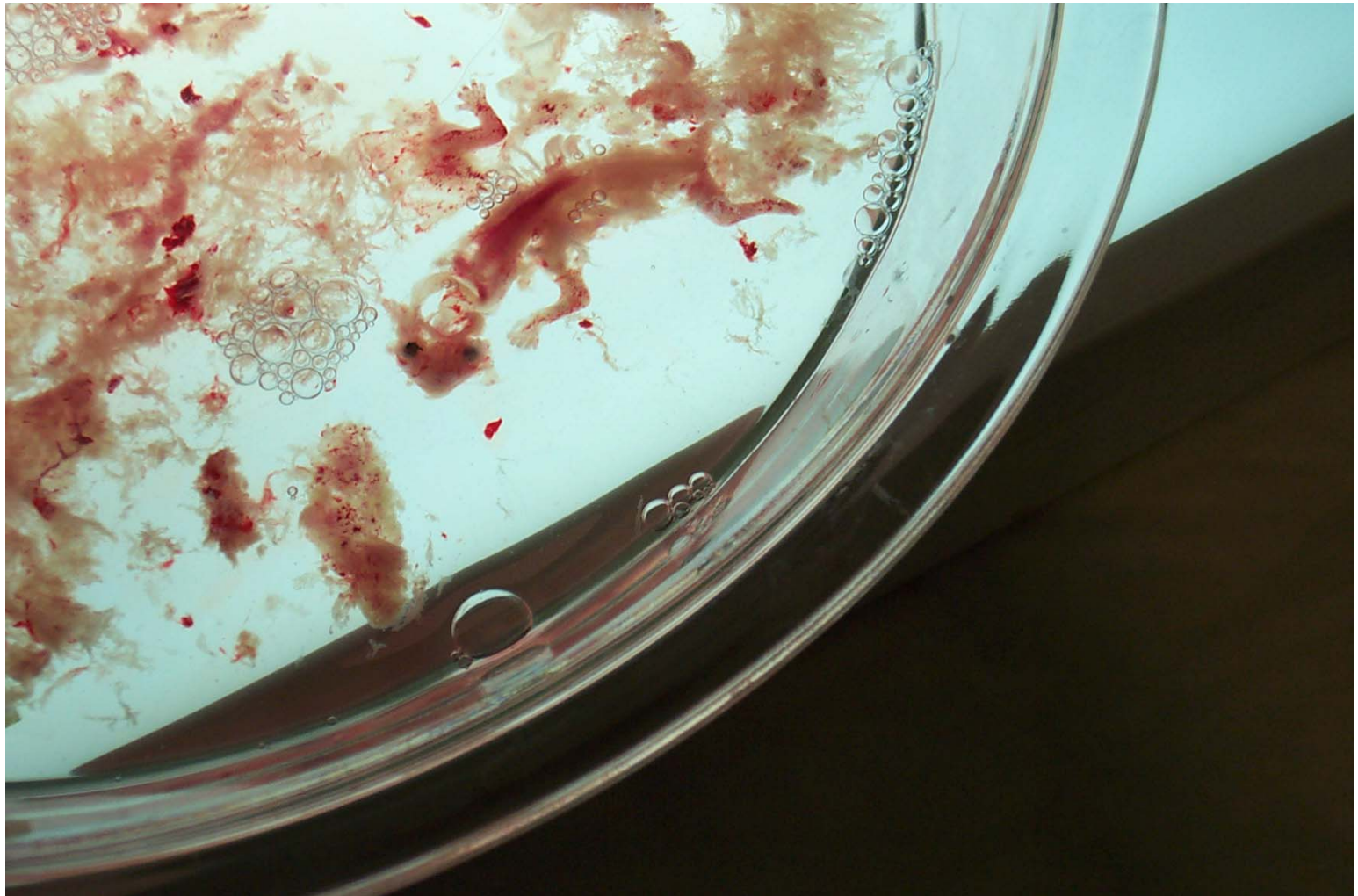
# Twelve Weeks







## The Basics of First-Trimester Surgical Abortion





**What should you do if there is too little pregnancy tissue?**

## If All the Expected Tissue Is not Found

- Re-examine all tissue, rinsing a 2<sup>nd</sup> time, perhaps adding vinegar to enhance visualization, if early gestation
- Check syringe, tubing, drapes, gauze, speculum, etc. for overlooked fragments
- Re-evaluate expected gestational age by patient history, examination and pre-operative ultrasound



## If All the Expected Tissue Is not Found (continued)

- Ultrasound the uterus to identify retained tissue, a missed pregnancy or a possible uterine anomaly
- Consider re-aspiration under ultrasound guidance depending on U/S findings
- Consider ectopic pregnancy

## If No Tissue is Found

### Consider

- Ectopic pregnancy
- False positive pregnancy test
- Uterine anomaly
- False channel
- Possibility of unreported spontaneous abortion

## Standard 2

When insufficient tissue or incomplete products of conception are obtained, the patient must be reevaluated.

## Standard 2 (continued)

- Recommendation 2.1
  - Follow-up pelvic ultrasonographic examination should be considered.
  
- Recommendation 2.2
  - Resuctioning should be considered.

## Standard 3

If insufficient tissue is present after adequate patient evaluation, a protocol to rule out ectopic pregnancy must be followed, and the patient must be informed of symptoms and dangers of ectopic pregnancy.

## Standard 3 (continued)

- Recommendation 3.1
  - If the uterine cavity is determined to be empty, serial quantitative hCG or sensitive uterine pregnancy test should be measured.

## Standard 4

The patient must not be released from follow-up care until the diagnosis of ectopic pregnancy has been excluded or an appropriate referral has been documented.

## Standard 4 (continued)

- Recommendation 4.1
  - A 48 hour post-procedure serum quantitative hCG test should be done. If there is a decrease of 50% or more, no further ectopic follow up is necessary.
- Recommendation 4.2
  - If 48 hour post-procedure serum quantitative hCG testing shows no change , or a subnormal increase in value, ectopic pregnancy evaluation and definitive treatment should be instituted and documented, or a referral made and documented.



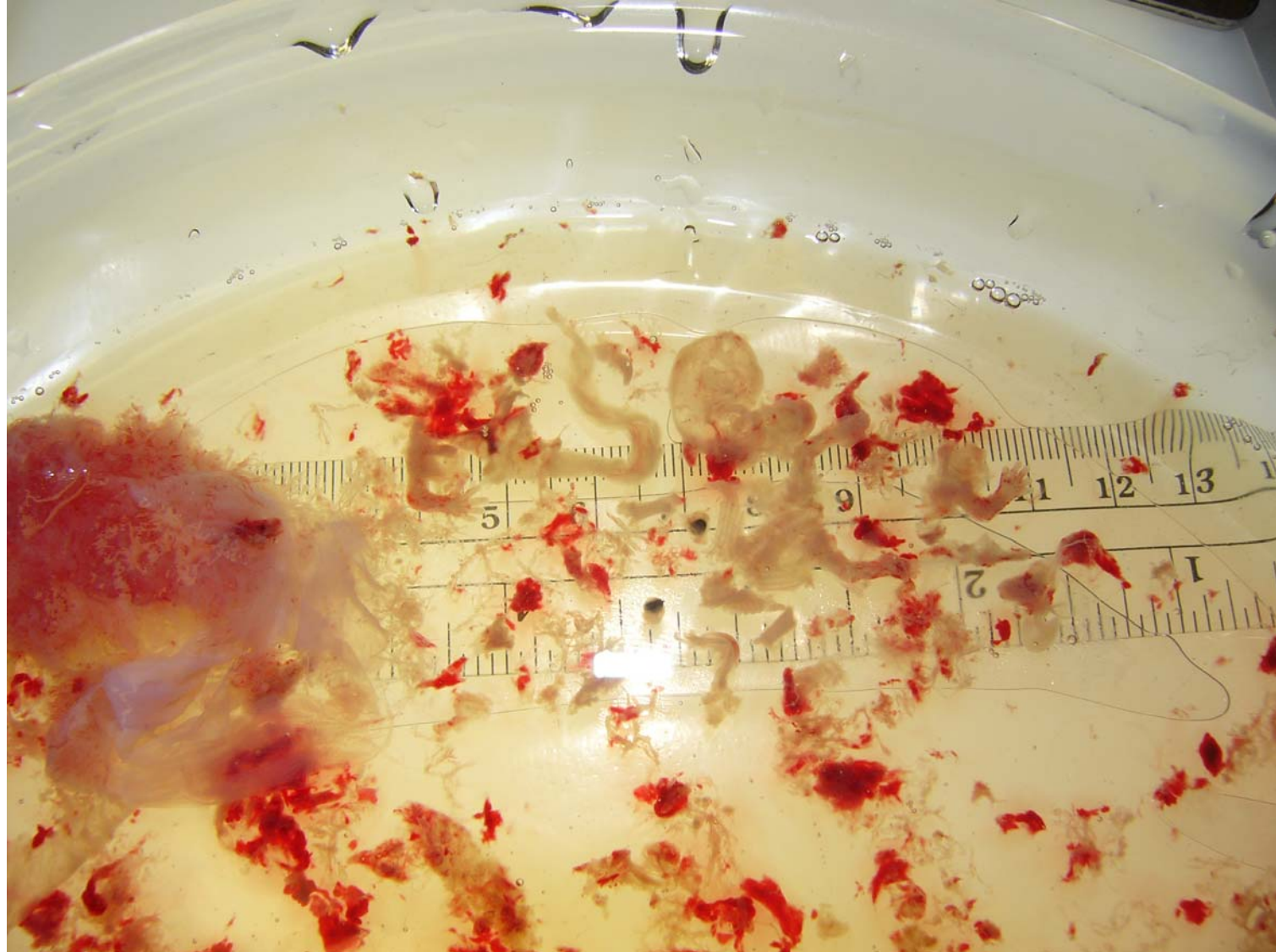


**How do you dispose of pregnancy tissue?**

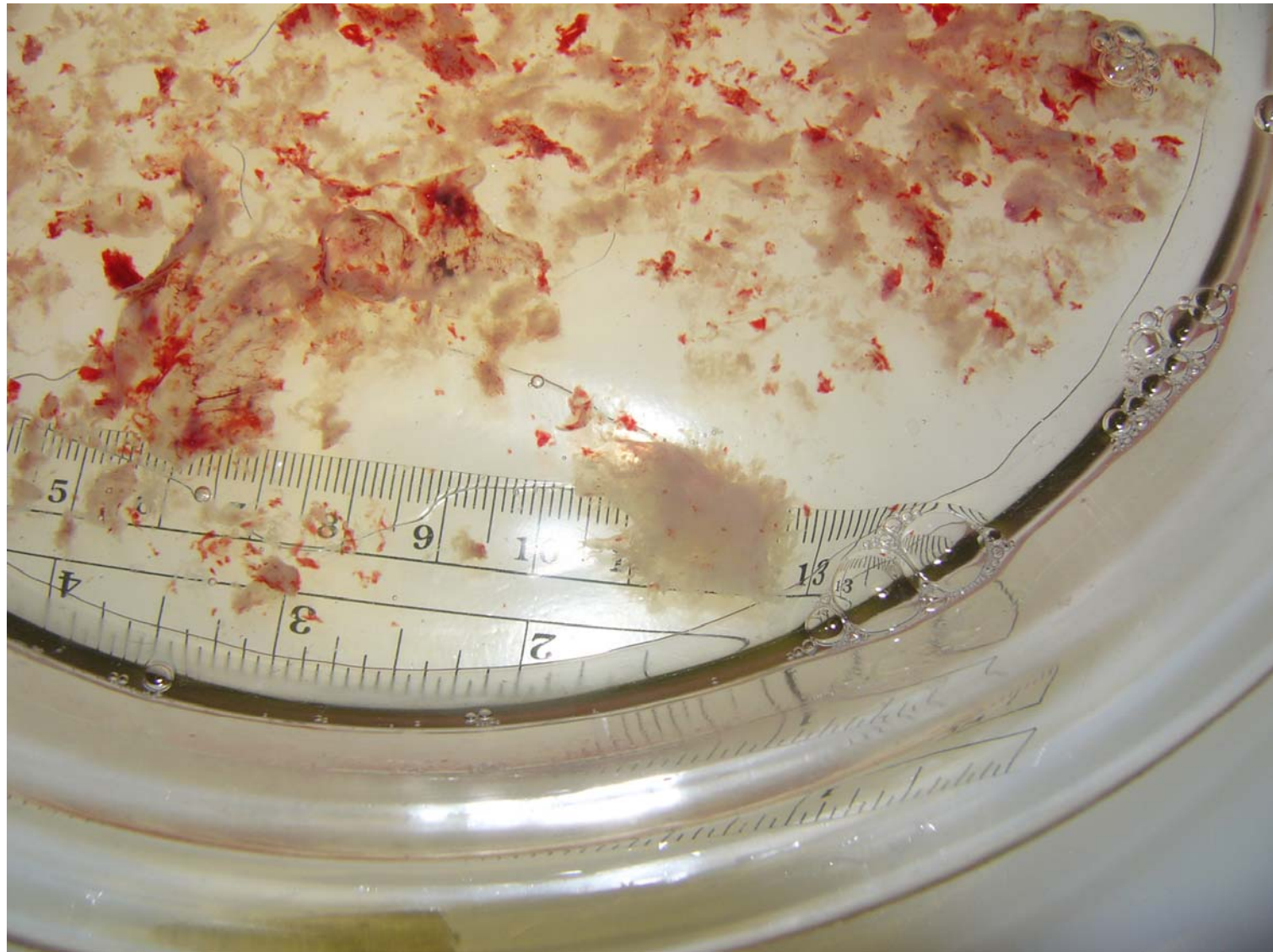
# Tissue Inspection and Disposal of Tissue

- Handle all tissue using standard infection prevention protocols.
- Dispose of tissue according to institutional, local or state rules and regulations.

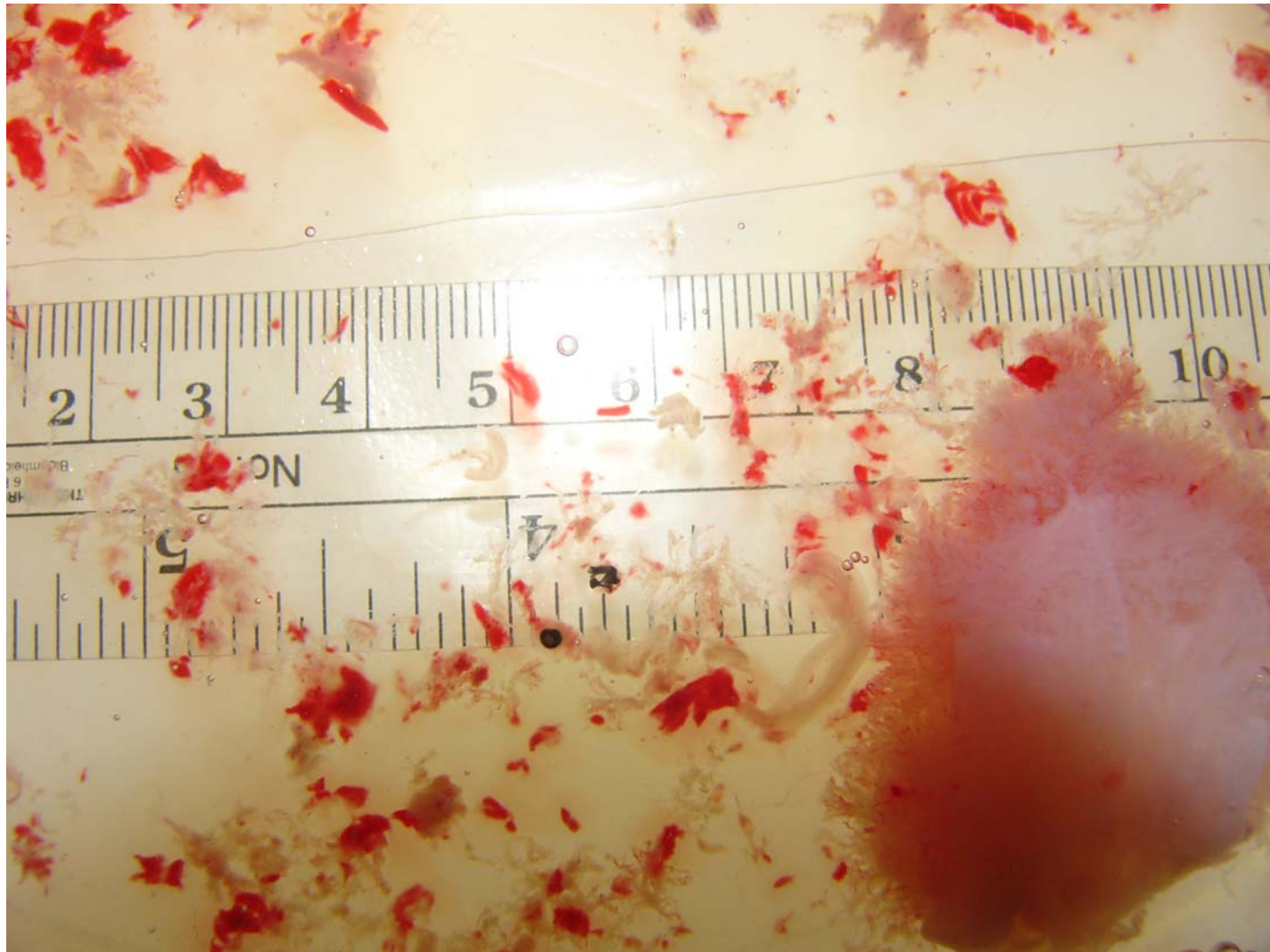
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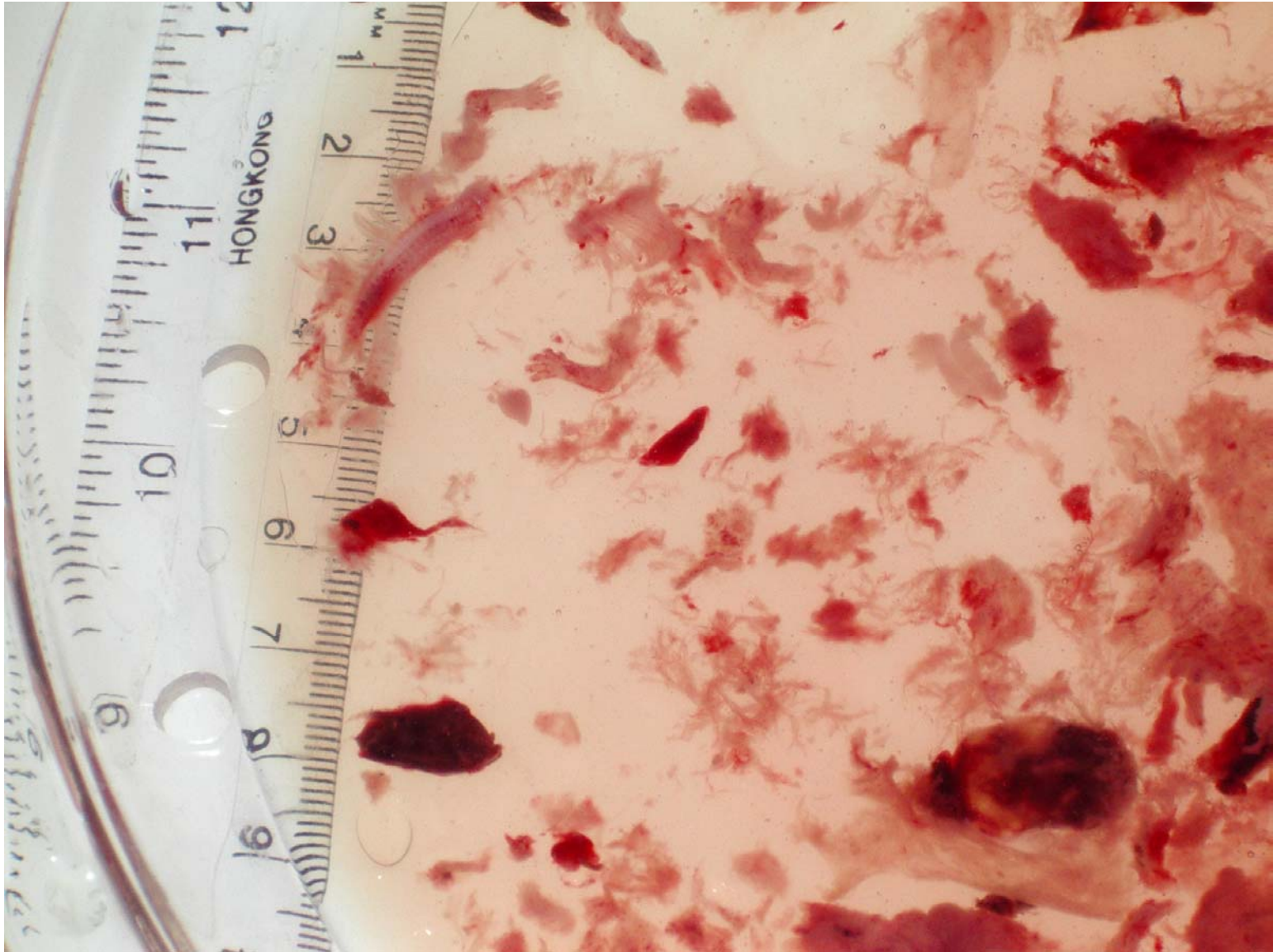




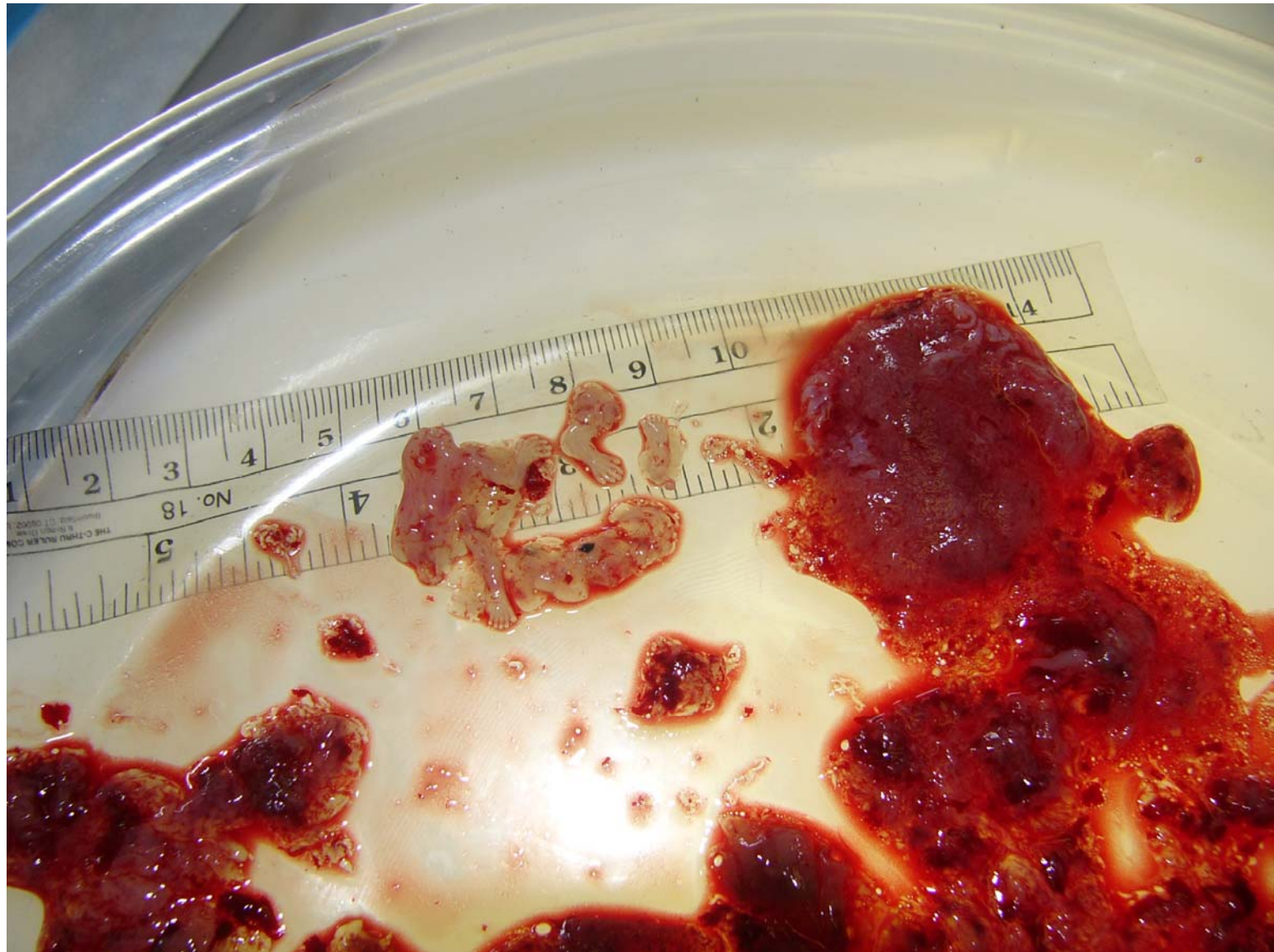


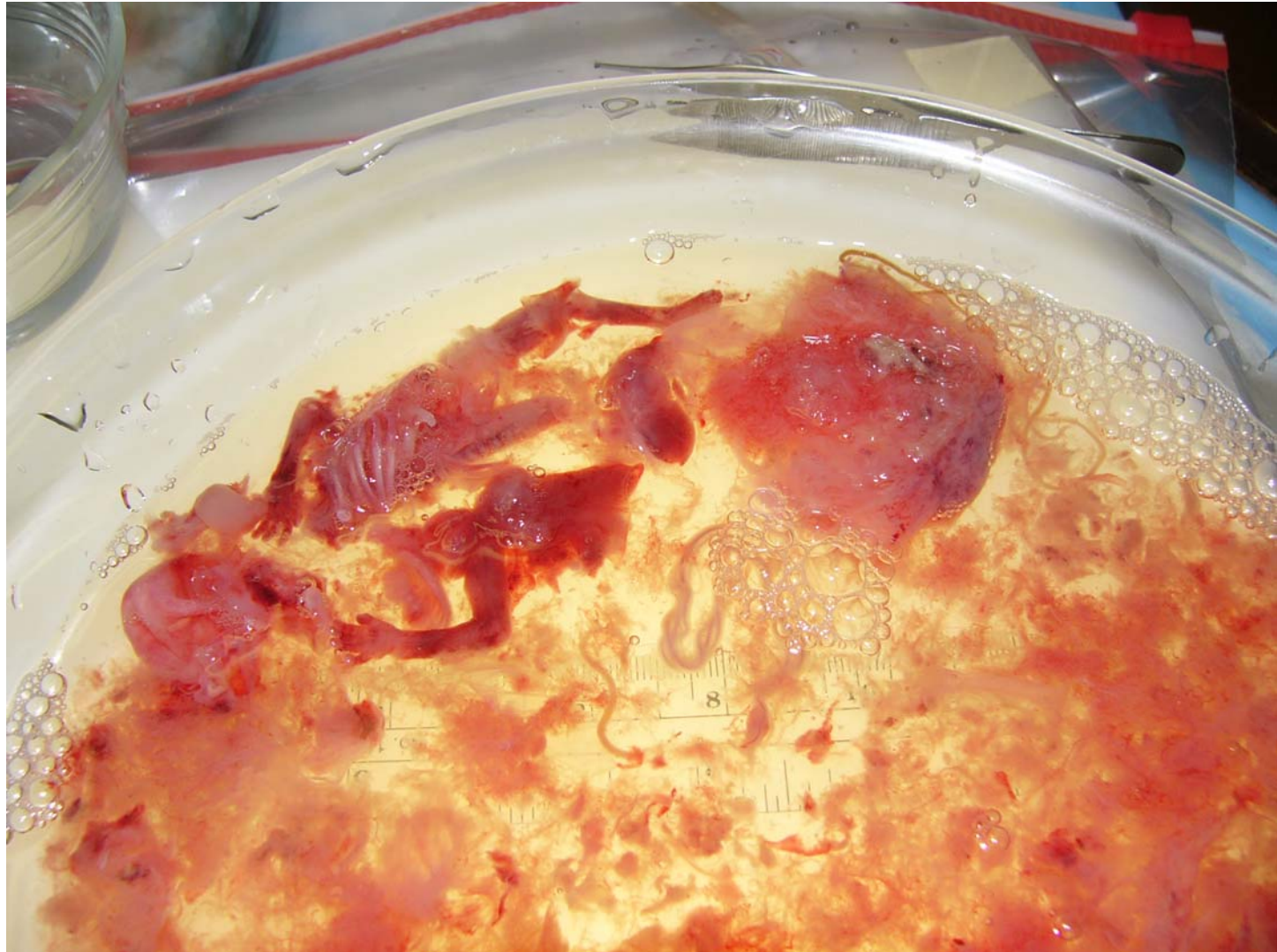


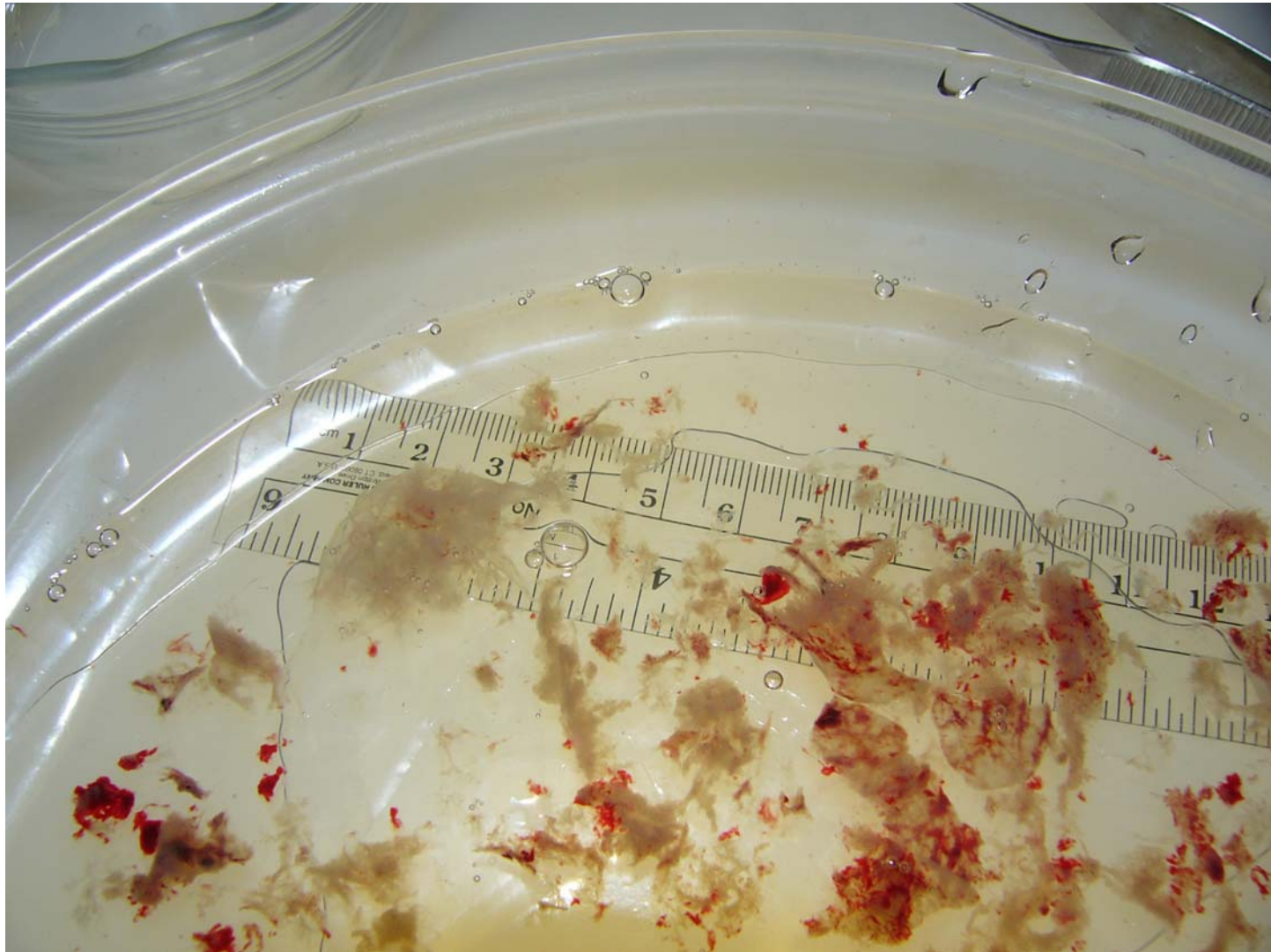
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