

Zagazig University
Faculty of Veterinary Medicine
Clinical Pathology Department



Practical Clinical Pathology

For Fourth Year Student

2016-2017

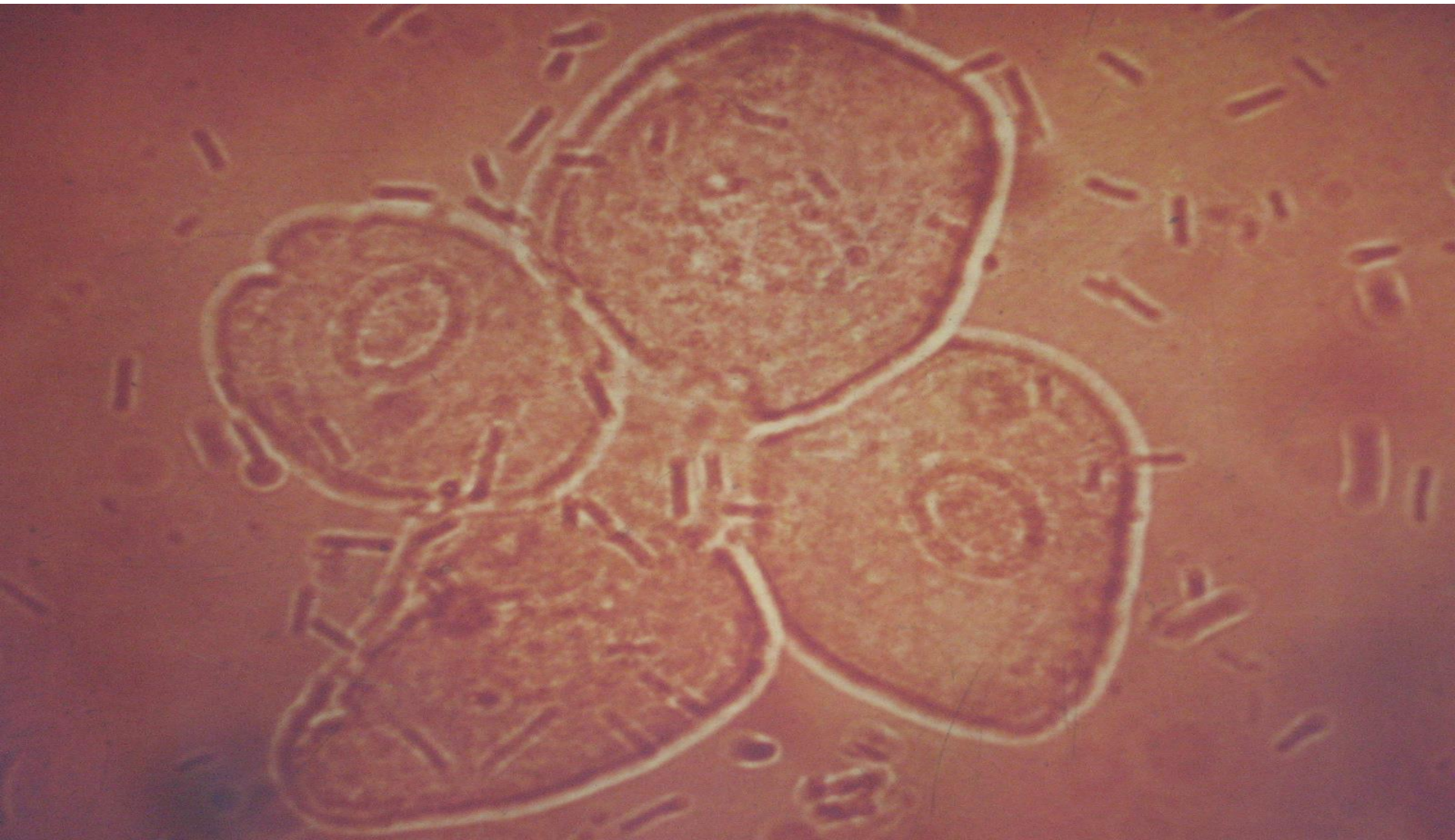
RINALYSIS

1- MICROSCOPIC EXAMINATION

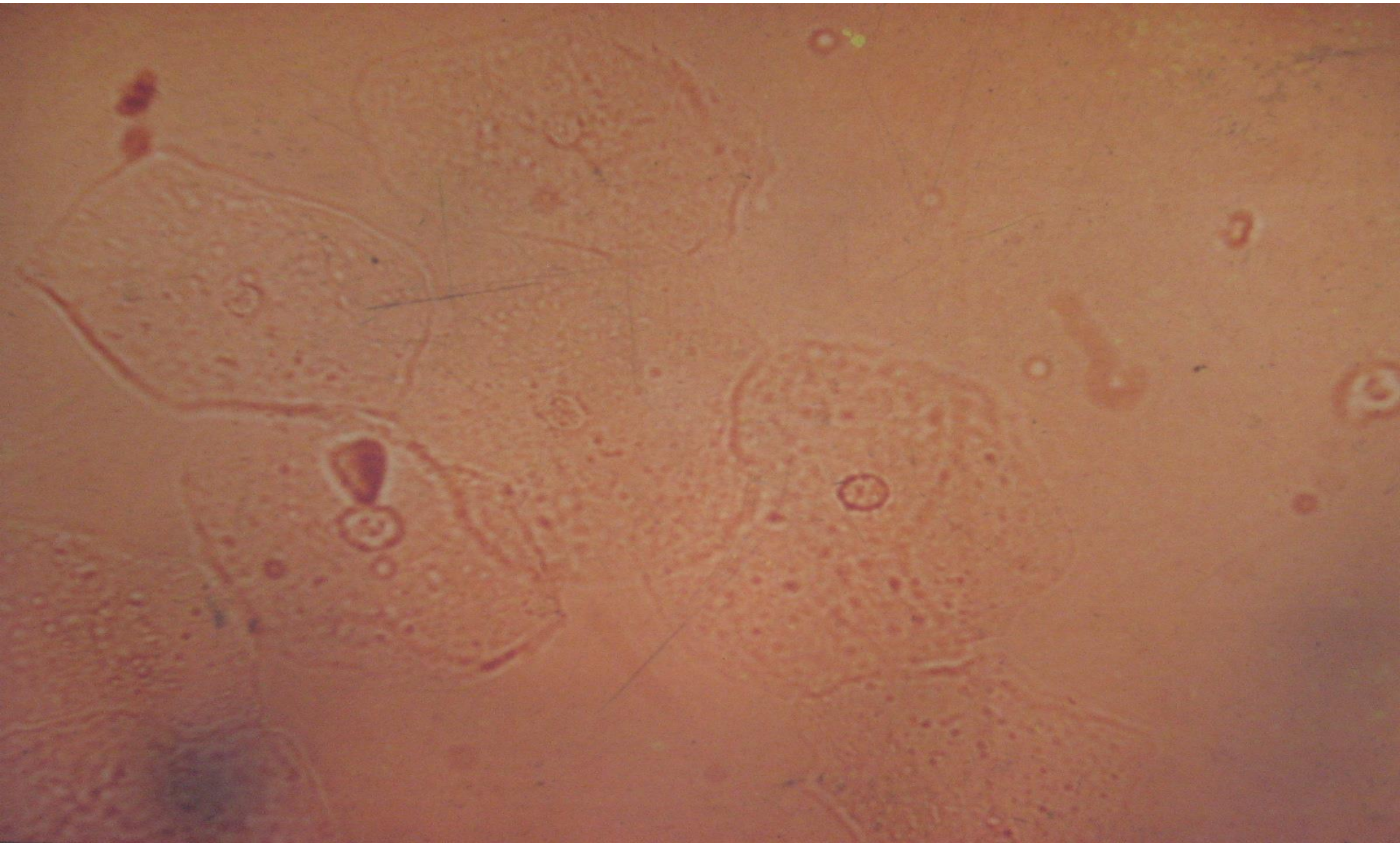
- The urine sediment is two types :
- (A)- Organized sediment.
- (B)- Unorganized sediment.

(A)- Organized sediment:

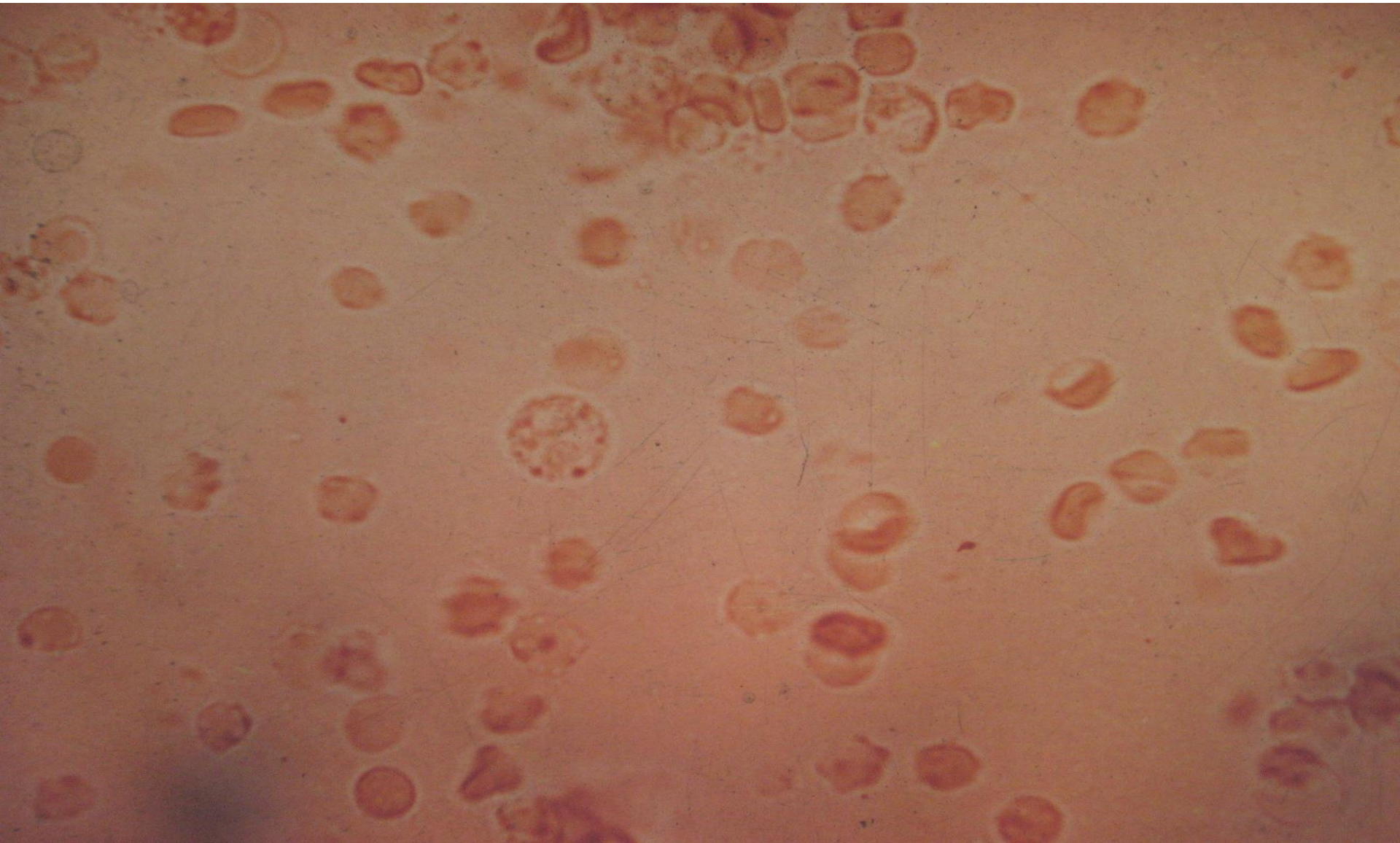
- 1- Transitional epithelial cells



2-Squamous epithelial cells

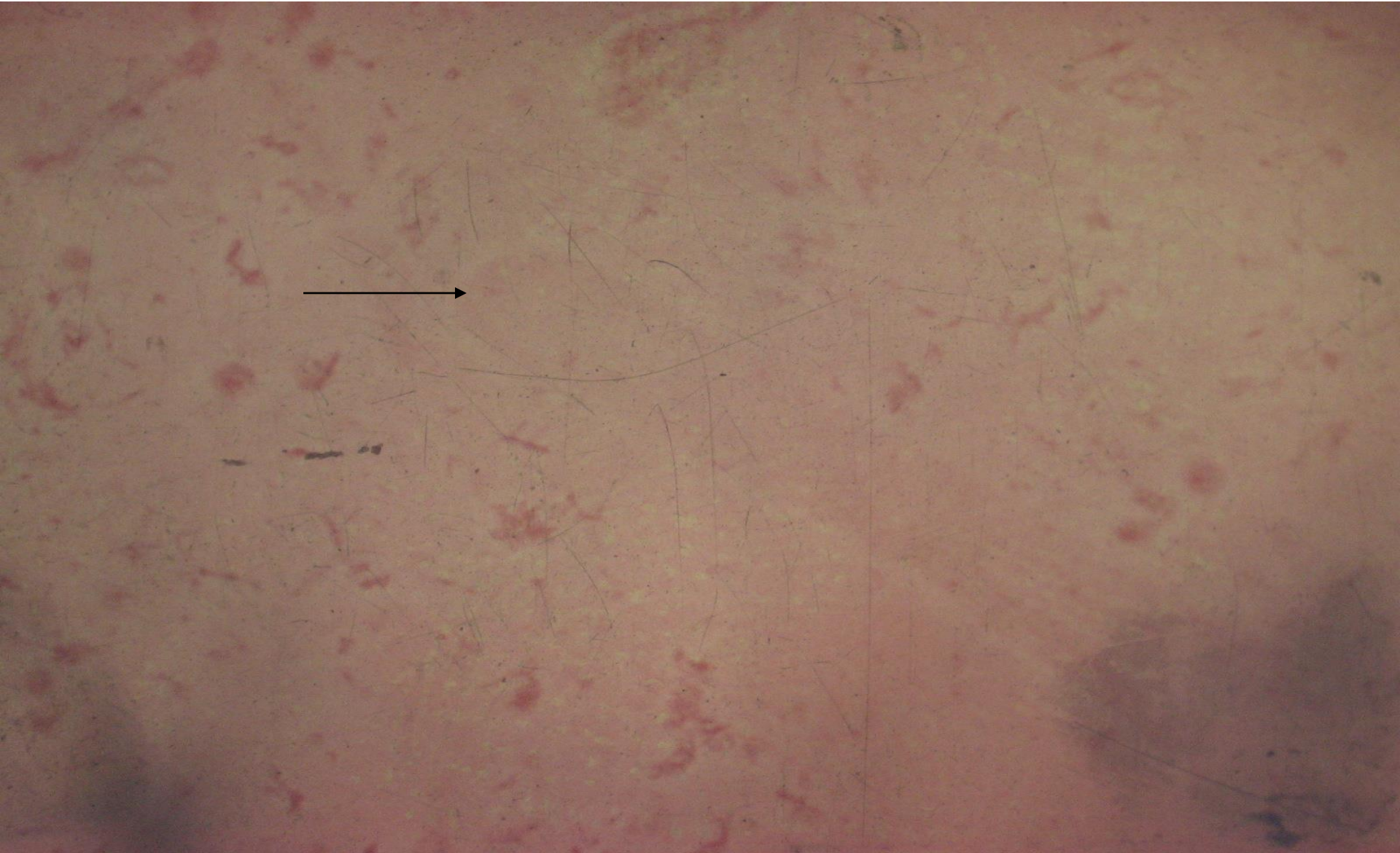


3- Rbcs + Wbcs.



4-Casts

A- Hyaline cast. (rounded end)



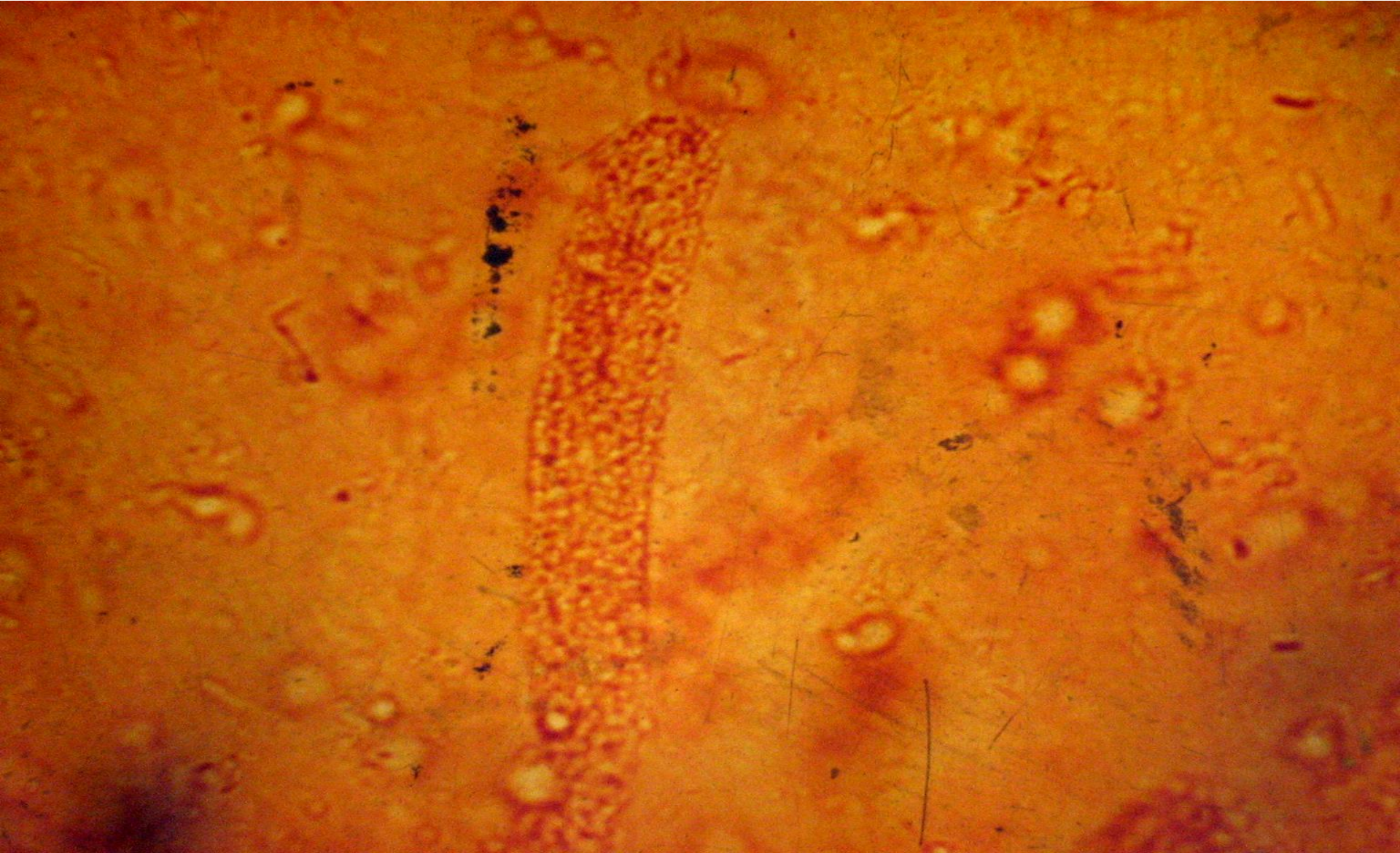
B- Epithelial cast



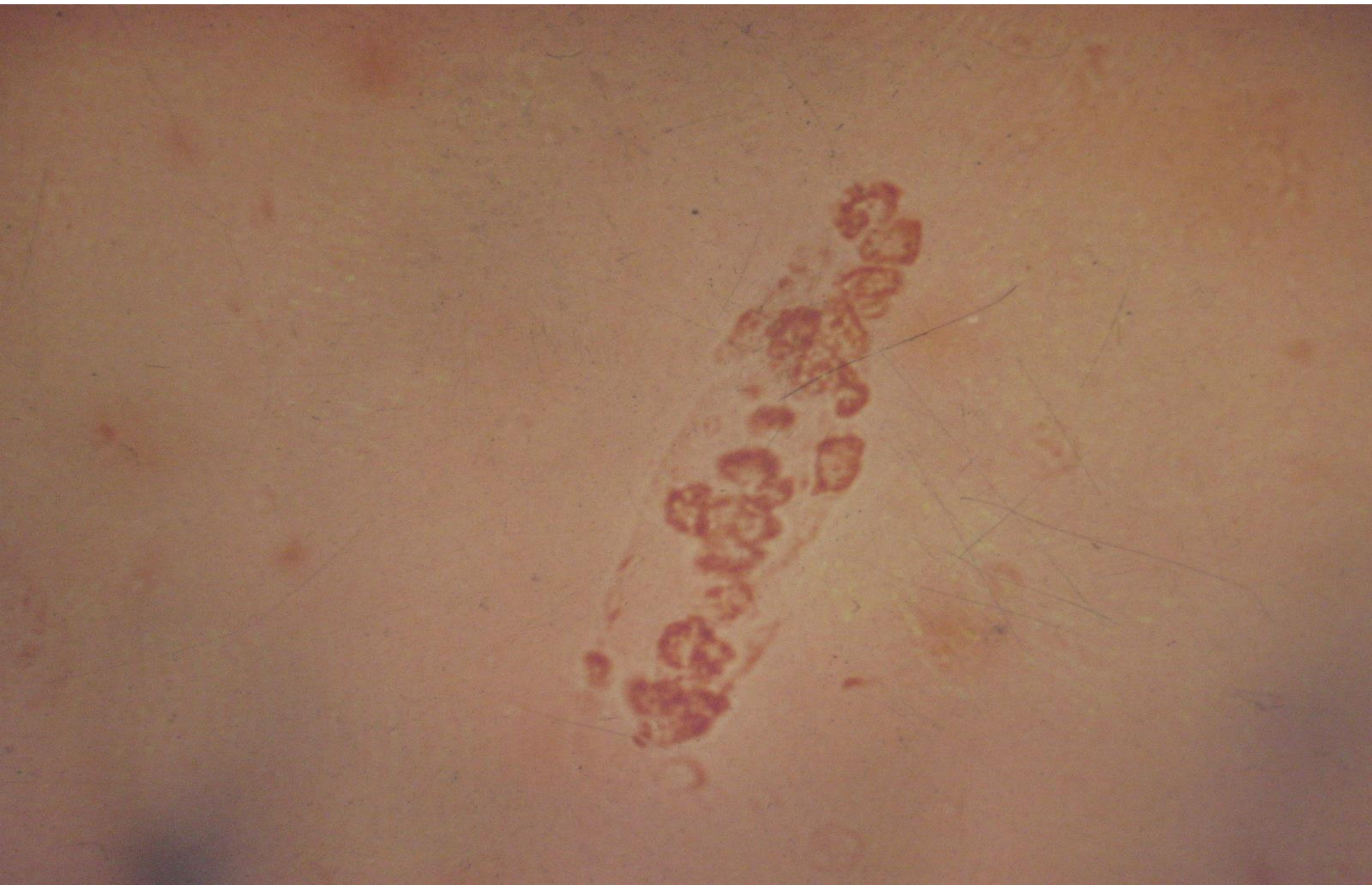
C- Coarse granular cast



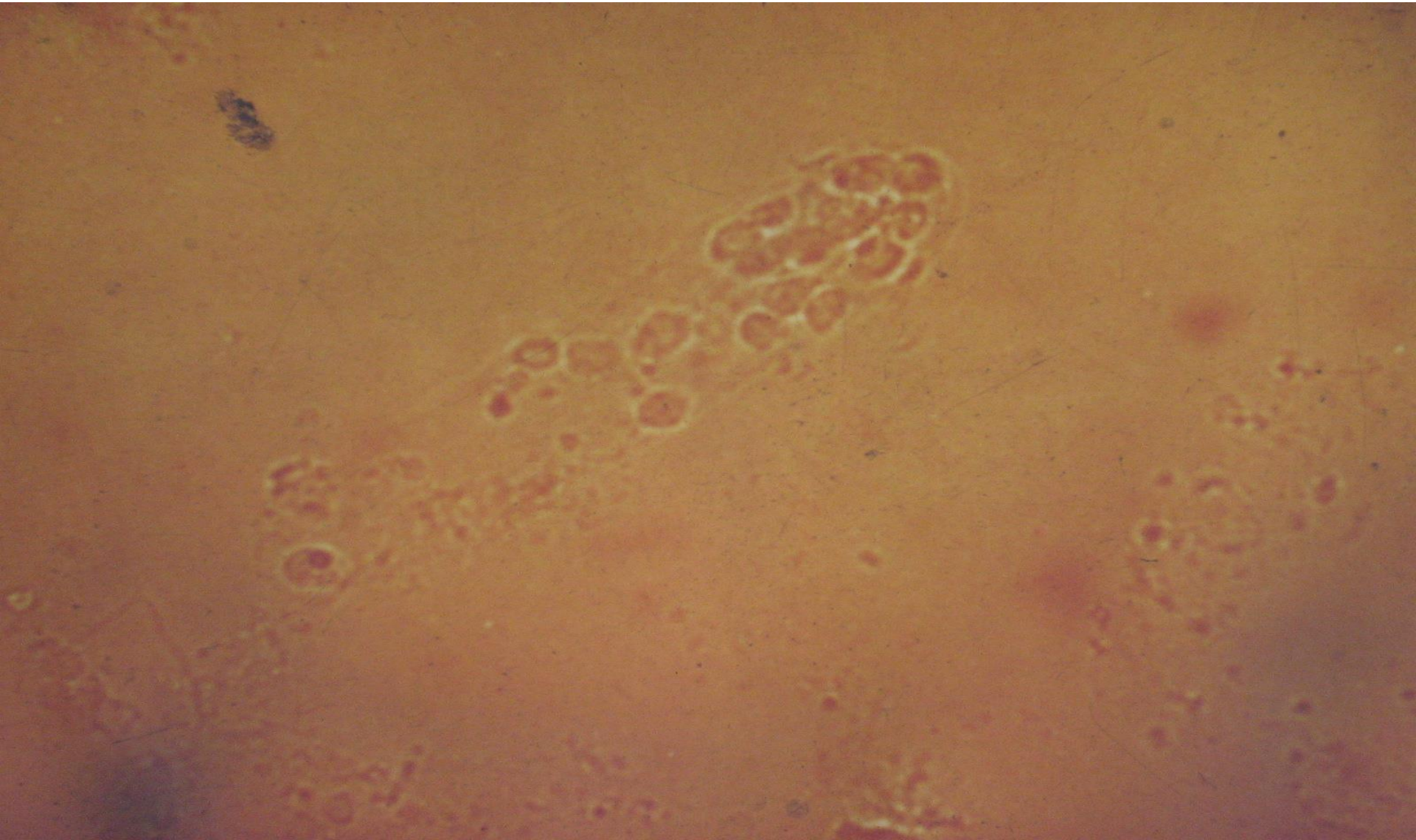
D- Fine granular cast



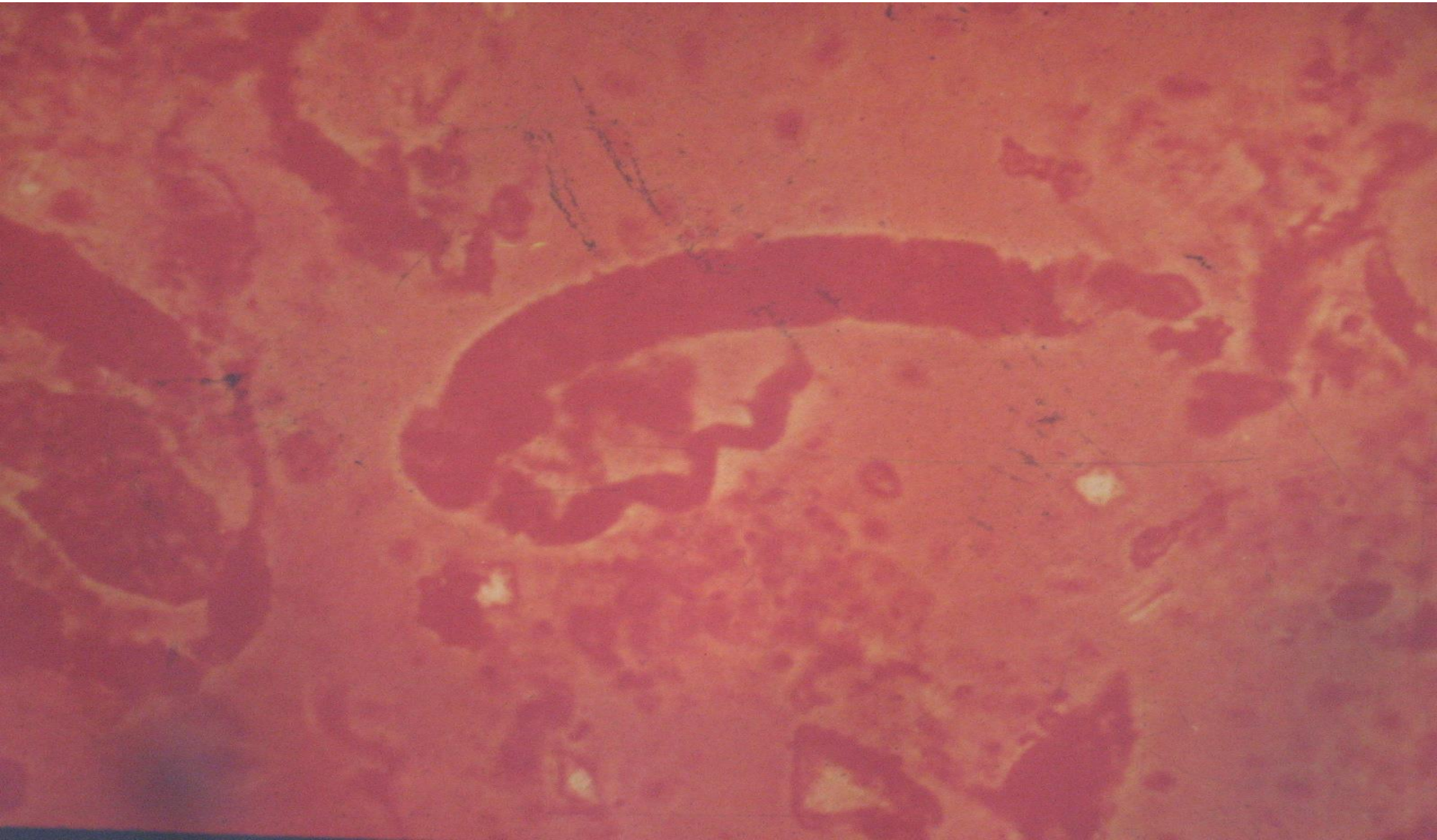
E-Leucocytic cast.



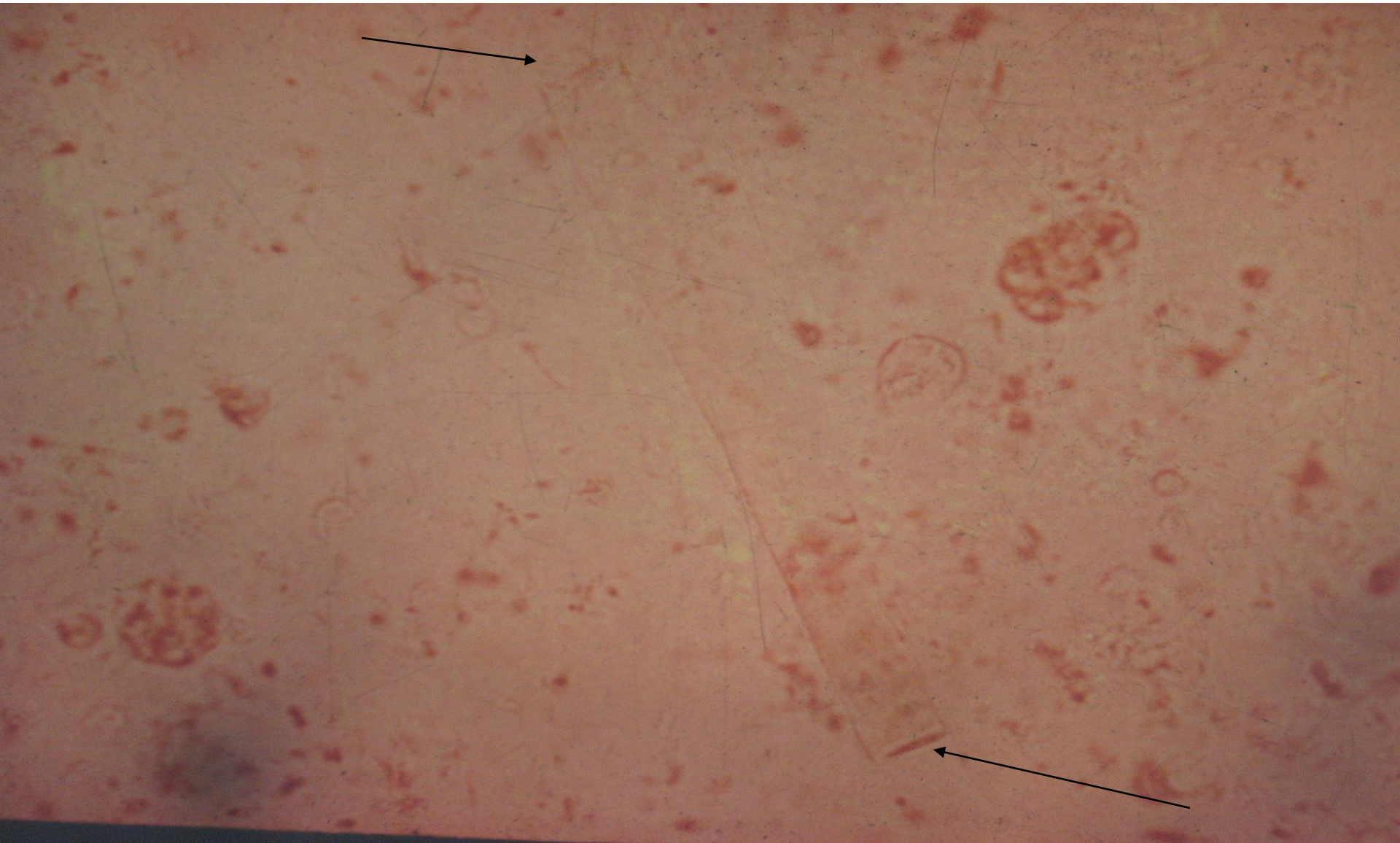
F- Erythrocytic cast.



G- Convoluted cast

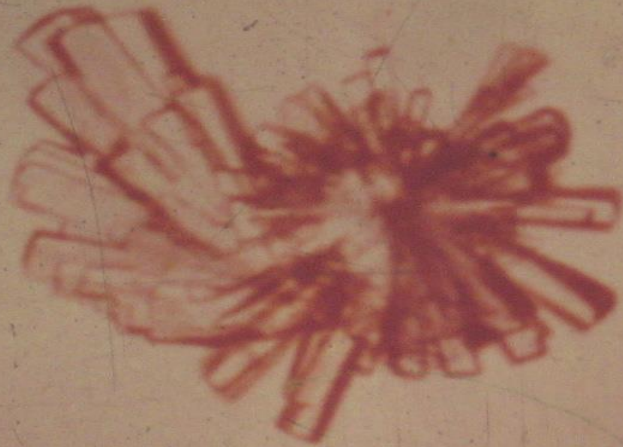


H- Waxy cast (blunt end)



(B)- Unorganized sediment
[Crystals]

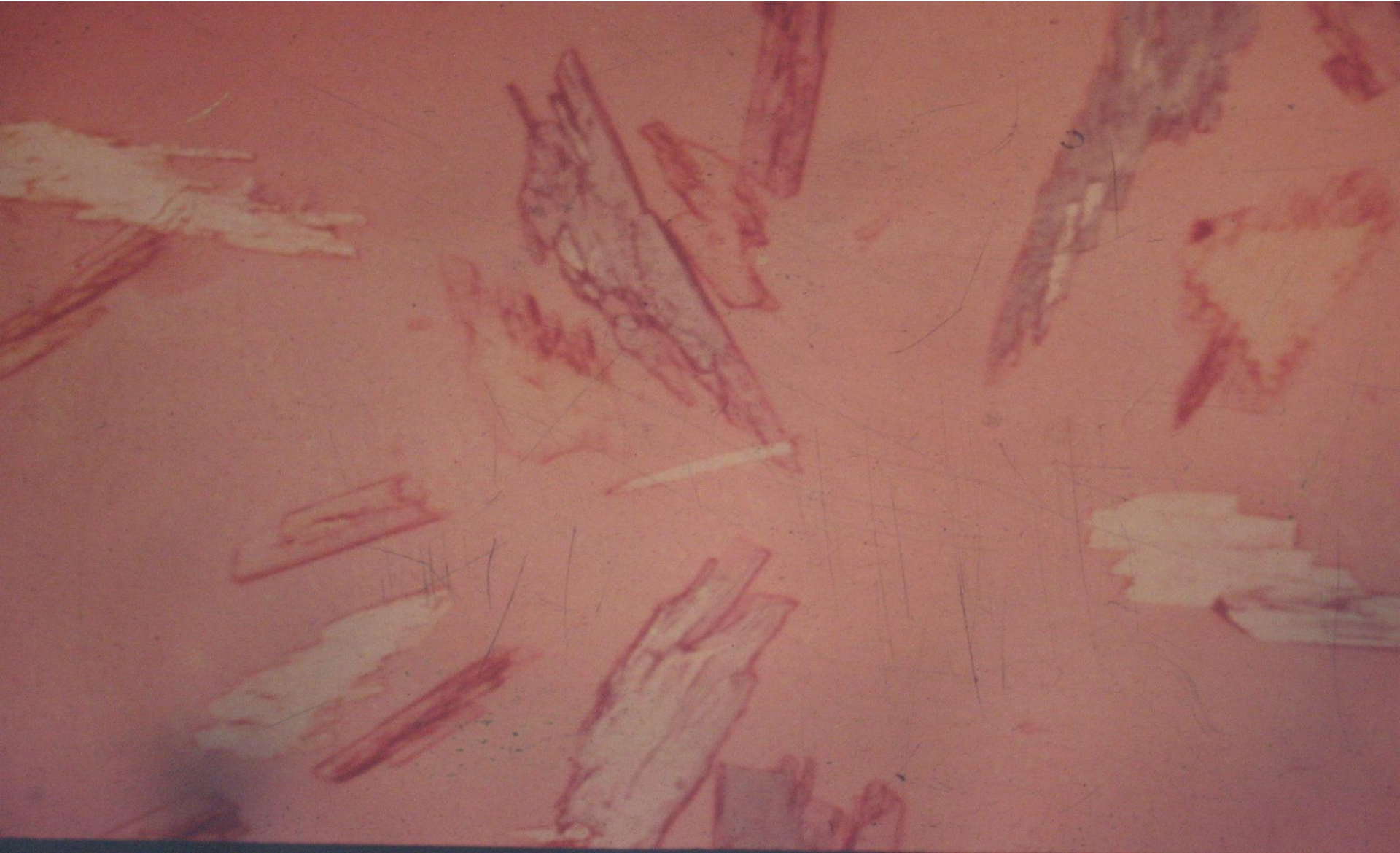
Ca. phosphate



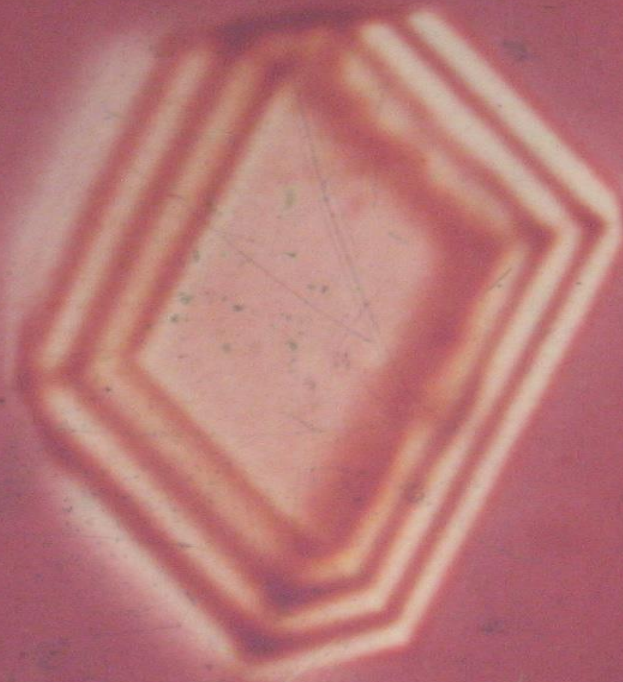
Triple phosphate



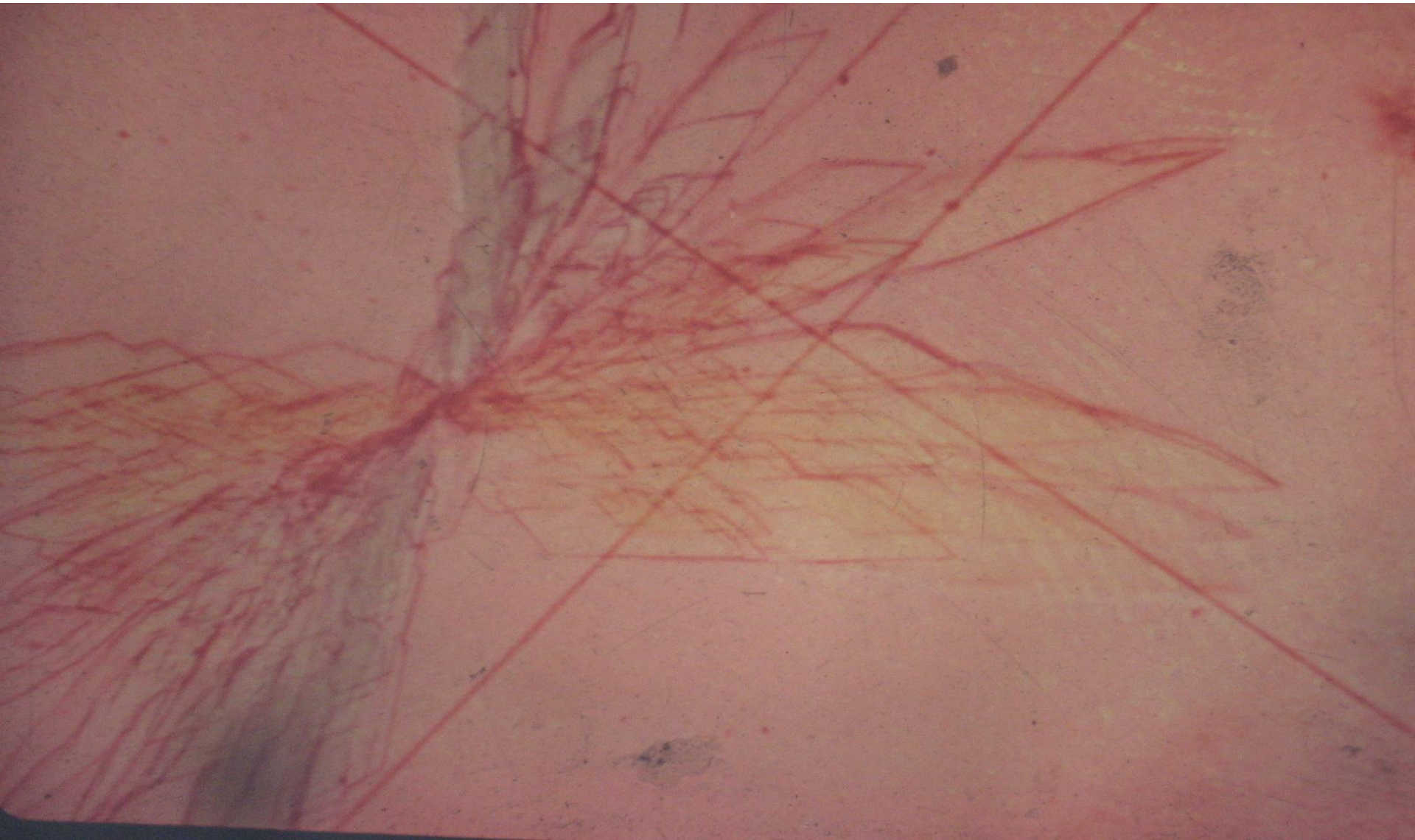
Triple phosphate



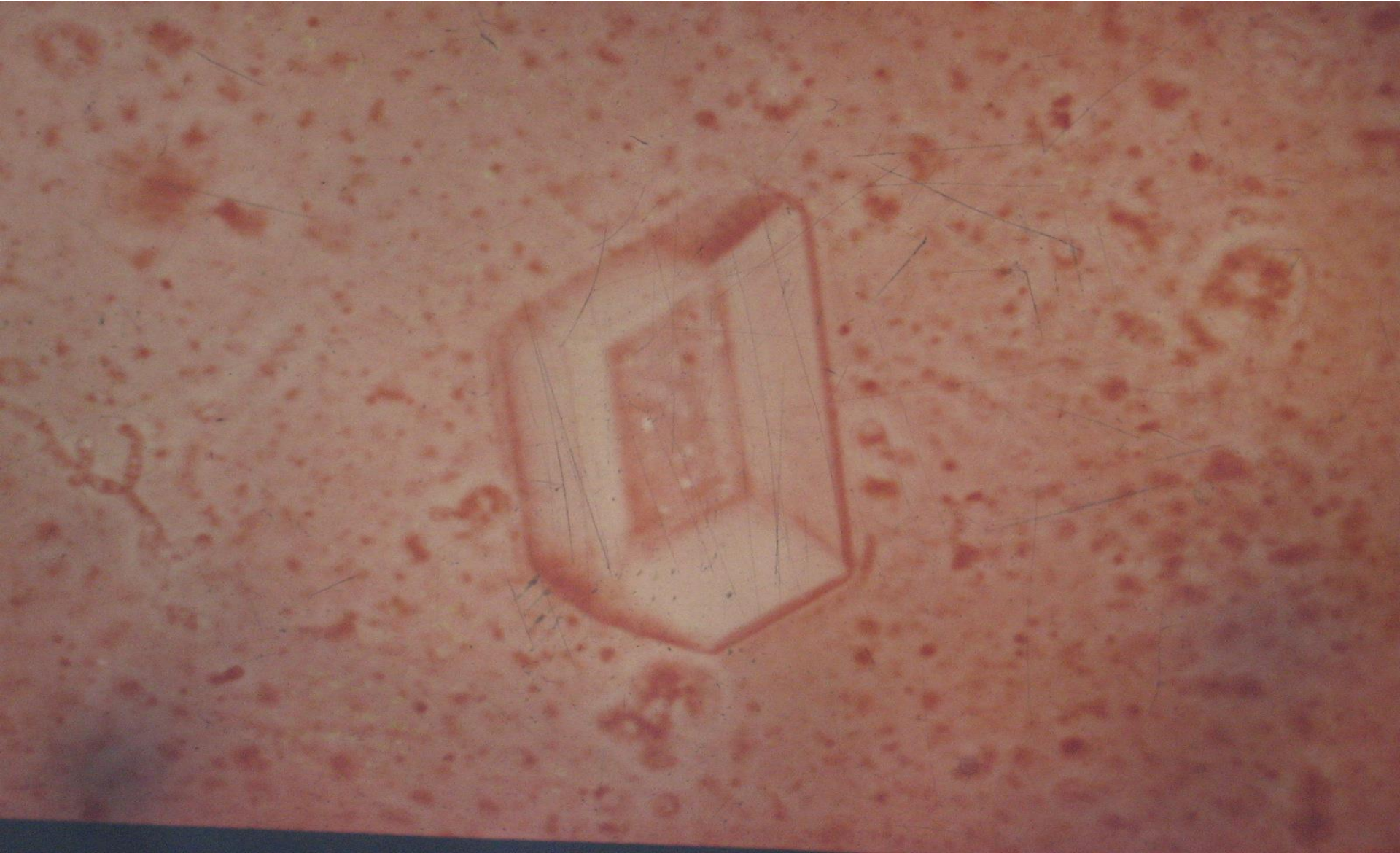
Ca phosphate



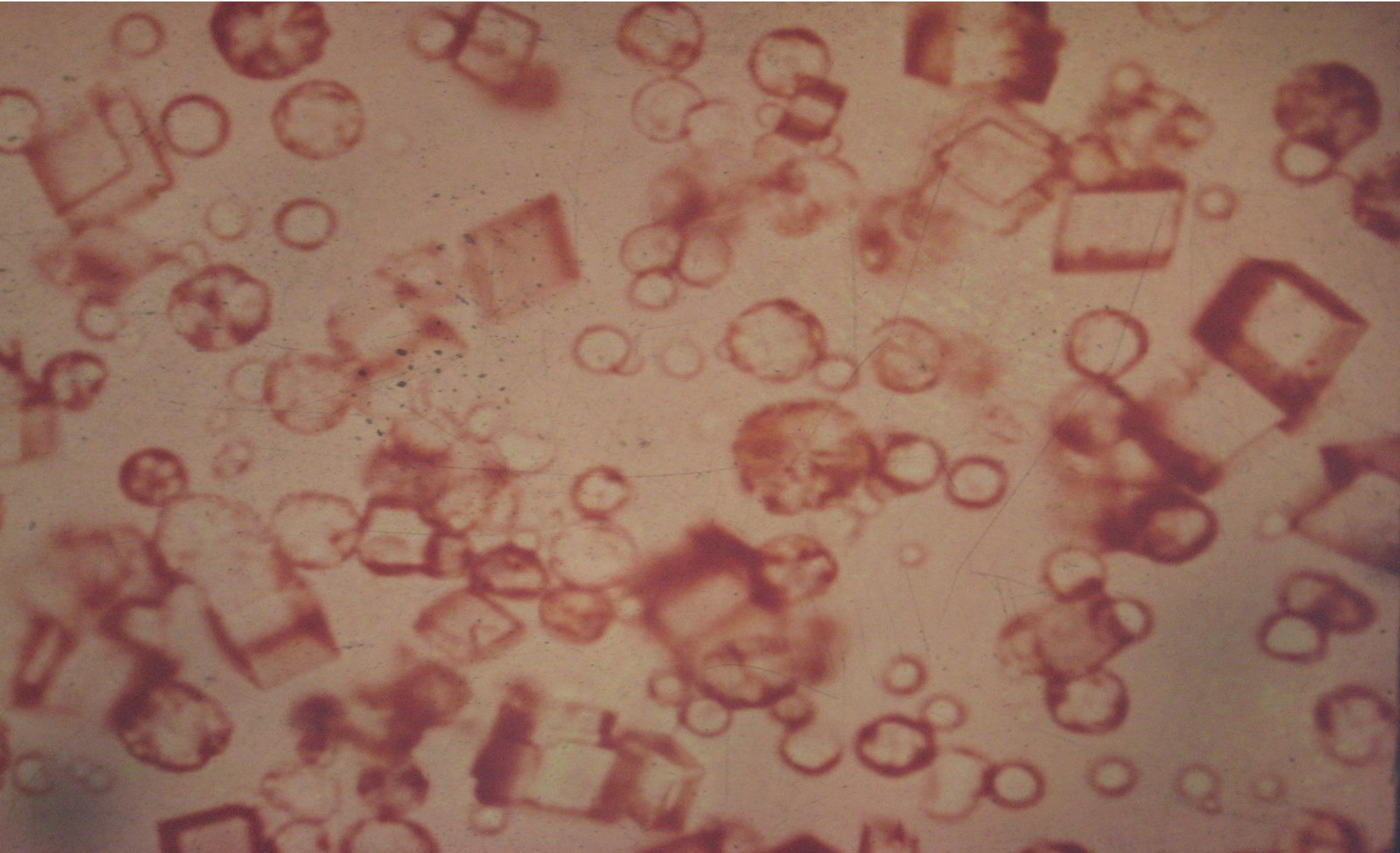
Triple phosphate



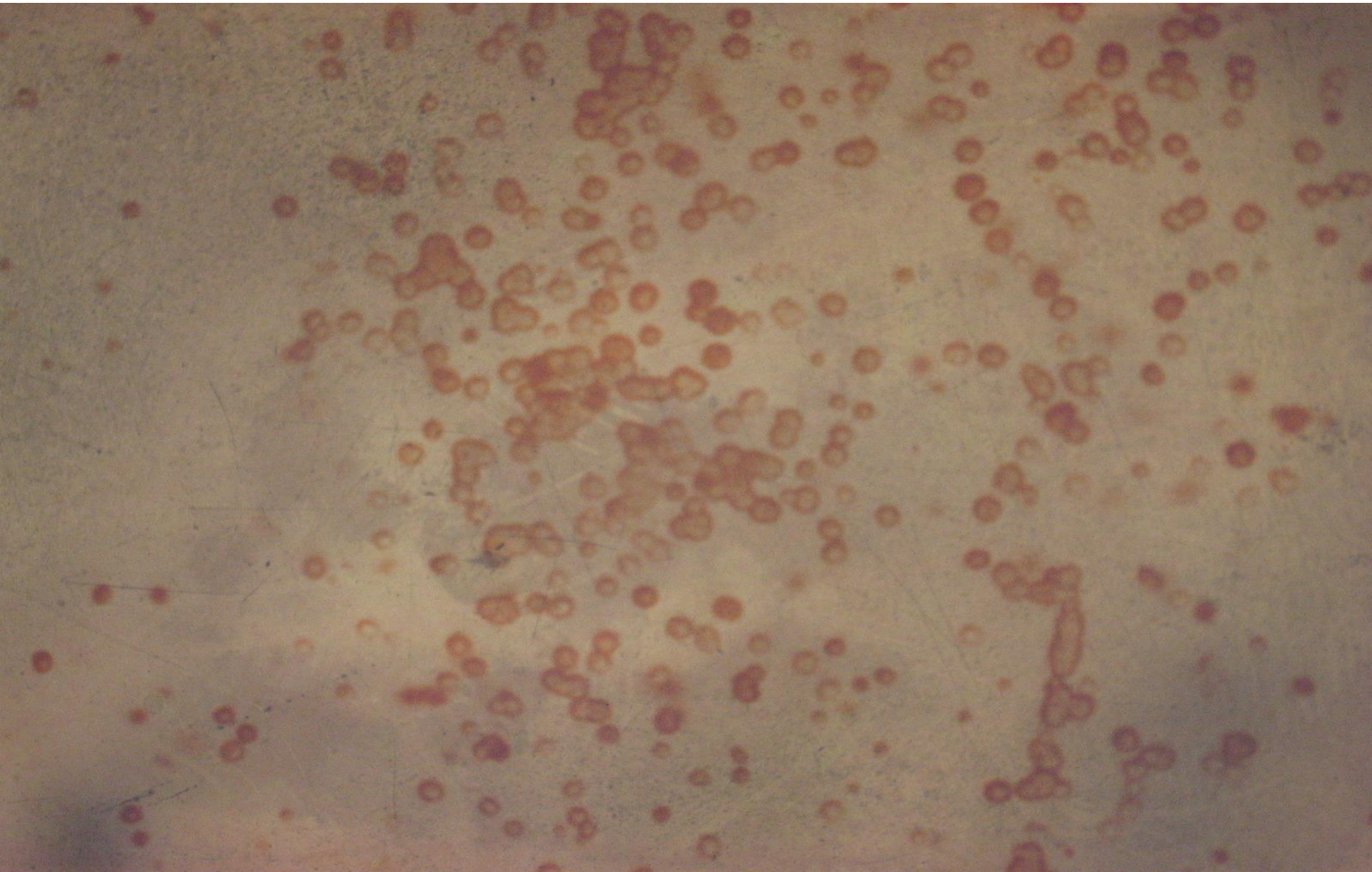
Triple phosphate



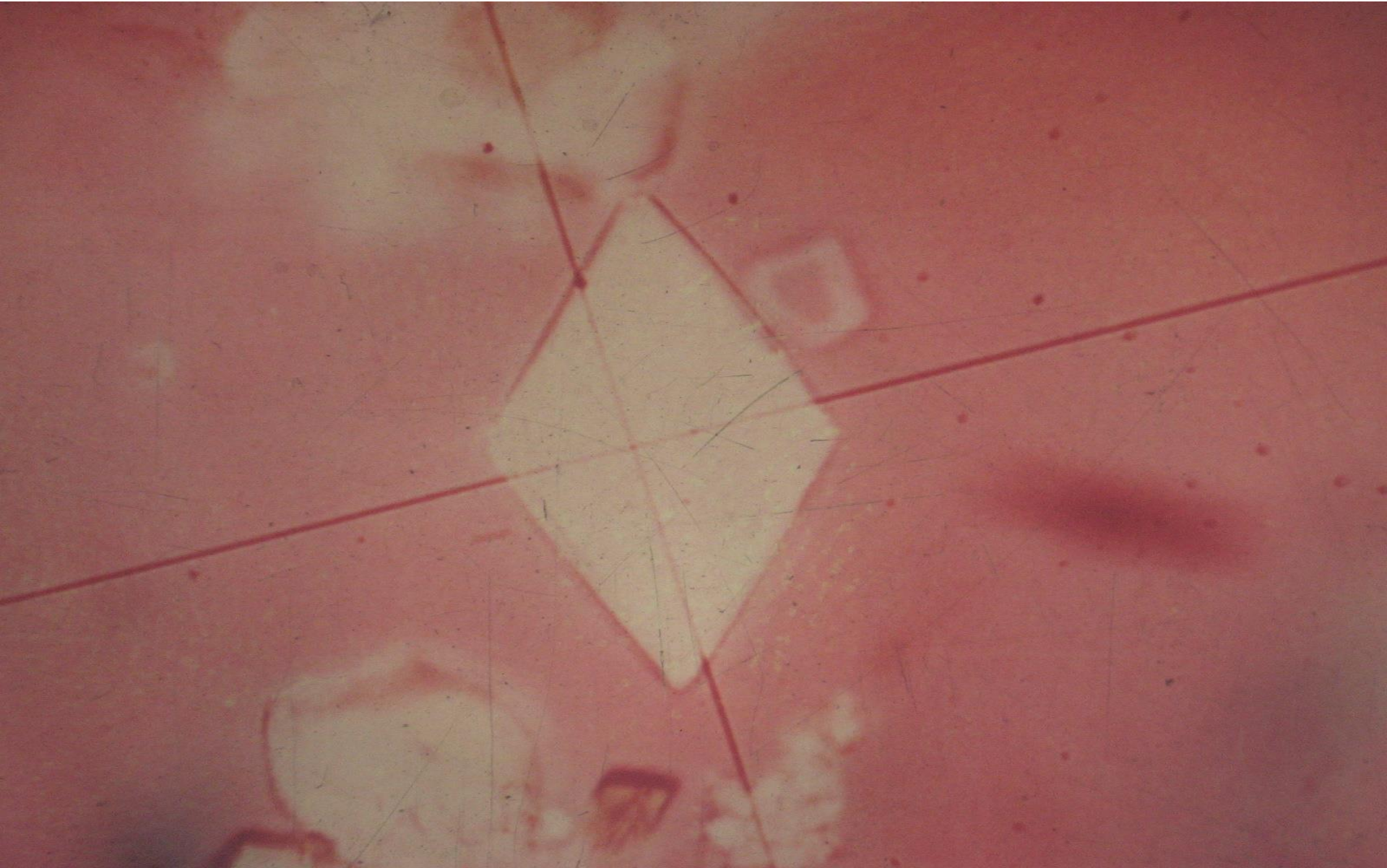
Ca. carbonate



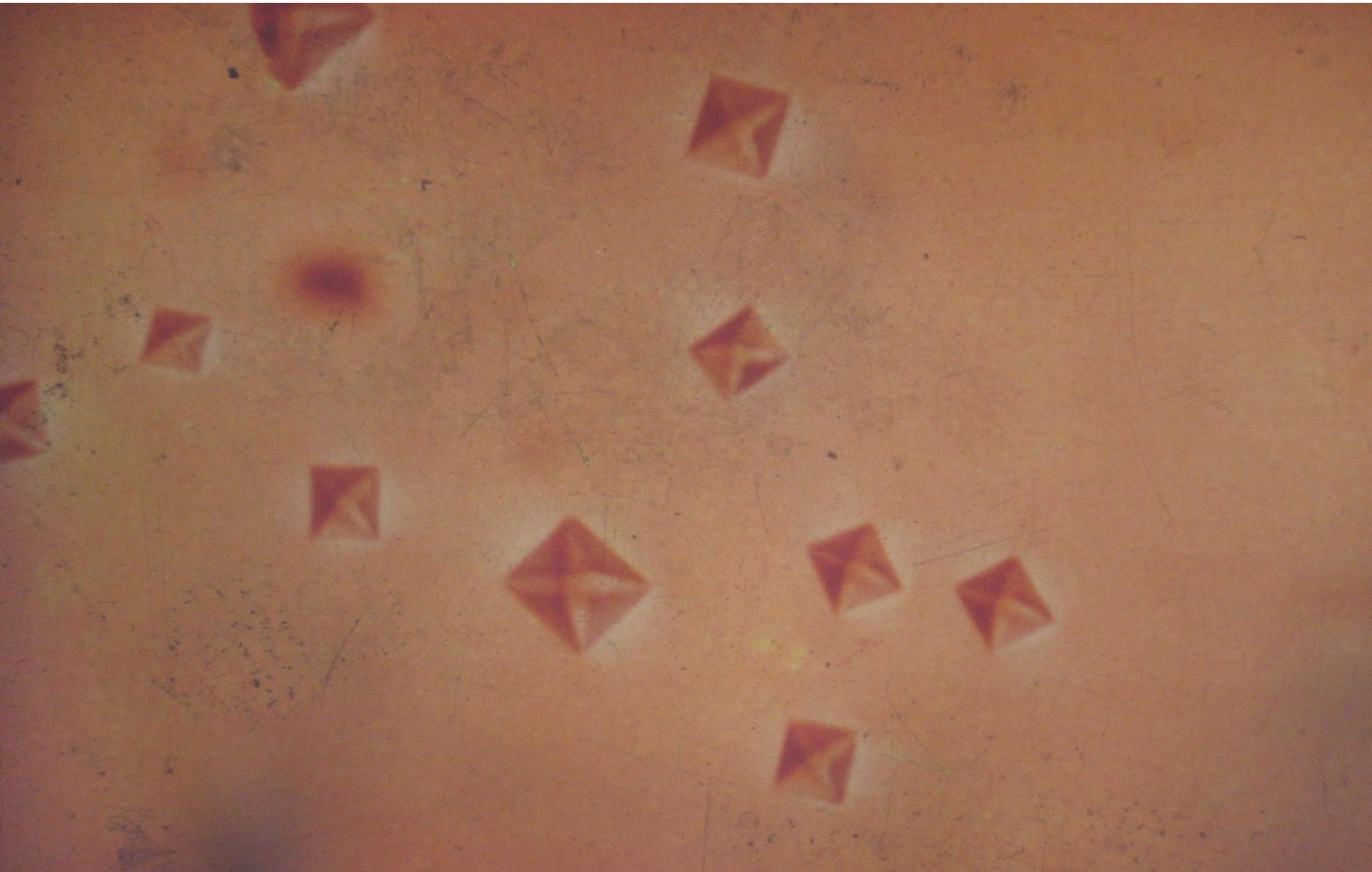
Amorphous urate



Uric acid



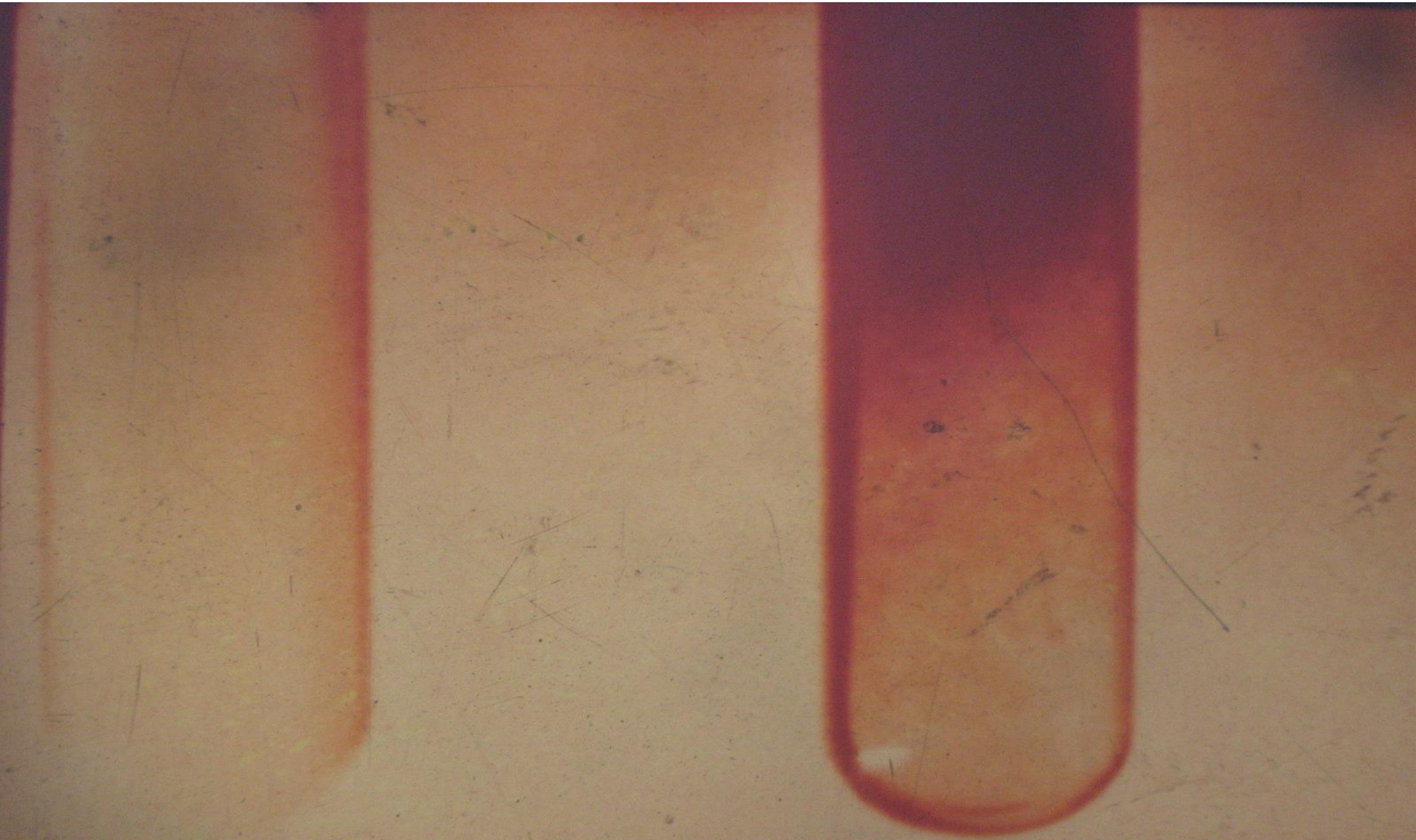
Ca. oxalate



Tyrosine



Benzidine test



Hematuria

