
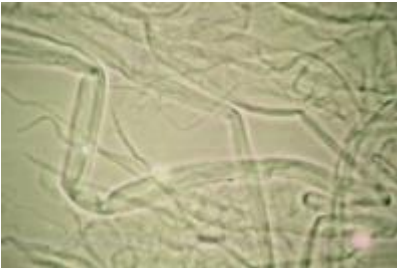

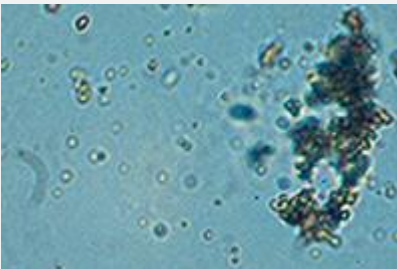

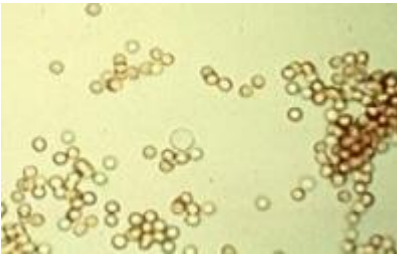

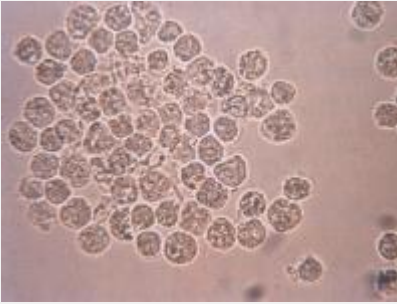
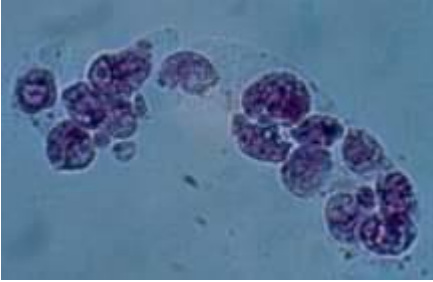


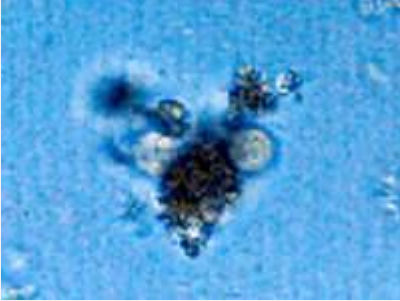
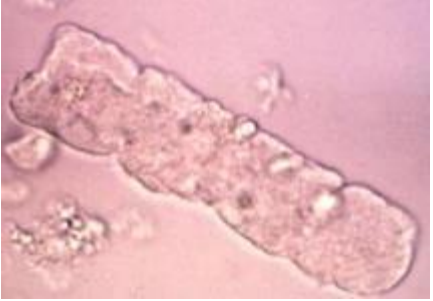



Microscopic Errors in Identification of Casts

Correlating the observation of possible casts with chemical findings and with other microscopic elements will help to prevent errors in identification. The table below lists other sources of error in identification of casts and offers suggestions to ensure proper identification.

Cast	May be confused with...	Identification Aids
 <p data-bbox="110 674 203 701">Hyaline</p>	 <p data-bbox="544 674 750 701">Mucous threads</p>	<ul data-bbox="1019 396 1502 716" style="list-style-type: none"> • Hyaline casts are more cylindrical than mucous threads. • Hyaline casts generally have rounded ends; mucous threads have irregular ends. • Hyaline casts may be missed if microscope light is too intense. View sediment using subdued lighting or use phase-contrast microscopy
 <p data-bbox="110 1073 224 1100">Granular</p>	 <p data-bbox="544 1037 880 1064">Amorphous crystals clump</p>	<ul data-bbox="1019 758 1318 785" style="list-style-type: none"> • Look for cast matrix
 <p data-bbox="110 1430 300 1457">Red blood cell</p>	 <p data-bbox="544 1379 831 1407">Red blood cell clumps</p>	<ul data-bbox="1019 1115 1485 1274" style="list-style-type: none"> • Look for cast matrix to distinguish from RBC clumps • Look for free RBCs in the microscopic field to distinguish from other types of casts
 <p data-bbox="110 1787 321 1814">White blood cell</p>	 <p data-bbox="544 1787 695 1814">WBC clump</p>	<ul data-bbox="1019 1472 1485 1736" style="list-style-type: none"> • Look for cast matrix to distinguish from WBC clumps • Use supravital stain or phase-contrast microscopy to more easily visualize multi-lobulated nuclei in WBCs within the cast to prevent misidentification as epithelial cell casts

Microscopic Errors in Identification of Casts

Cast	May be confused with...	Identification Aids
 Epithelial cell	 WBC cast	<ul style="list-style-type: none"> • Look for single nucleus in the inclusion cells
 Fatty	 Fecal debris	<ul style="list-style-type: none"> • Look for cast matrix • Use polarized light, which will reveal maltese cross formations if cholesterol is present
 Waxy	 Fibers and other artifacts	<ul style="list-style-type: none"> • Look for cast matrix • Look for parallel sides and squared-off ends