

# Pleural fluid cytology

# Normal

- Volume- .26ml/kg
- Sp. Gravity- 1.010 -1.026
- Total protein -1 -2 gm%
- Ph – 6.8- 7.6
- Cells – 1700/cmm

# Cause

- Changing transpleural pressure
- Impairing lymphatic drainage
- producing increase in mesothelial and capillary permeability

# Transudate and Exudate

- Transudate when hydrostatic forces influencing the formation and absorption is altered and permeability of capillaries is normal.
- Exudate when local capillary and pleural surface permeability is altered.

# Chylous effusion

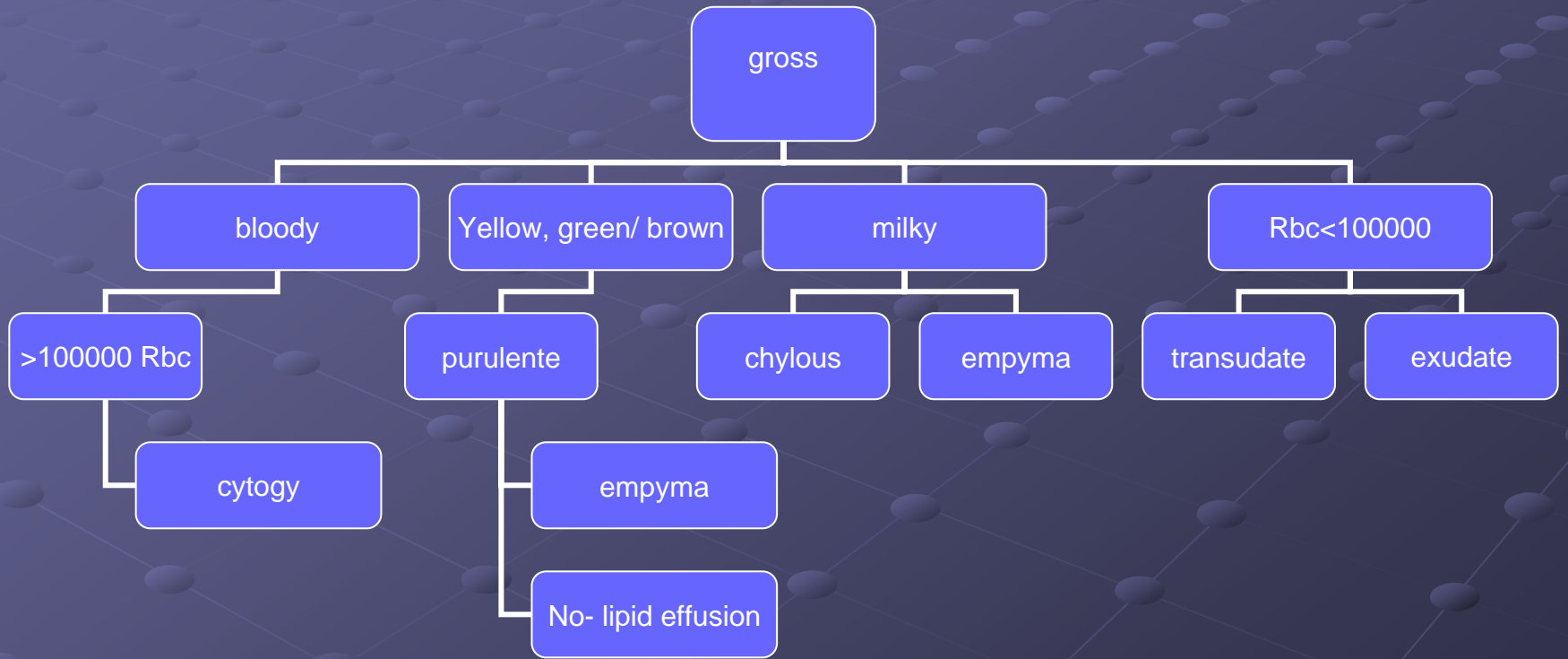
	chylous	pseudochylous
	sudden	gradual
triglyceride	>110mg/dl Chylomicrons present pf/s>2	<50mg/dl Chylomicrons absent
	lymphocytosis	Sheets, mixed cellularity

# Light's criteria

- Pf/s protein  $>0.5$
- Pf/s Idh  $>0.6$
- Pf Ldh  $> 2/3$  upper limit of normal s. Idh
- Pf cholesterol  $> 45\text{mg/dl}$
- Pf/s cholesterol  $>0.3$
- s/pf albumin gradient  $\leq 1.2\text{g/dl}$
- Pf/ s bilirubin  $>0.6$

# Differential

	transudate	exudate
Specific ratio	<1.016	>1.016
Protein	<3	>3
Pf/s protein	<0.5	>0.5
Ld	<200	>200
Pf/s Idh	<0.6	>0.6
Pf/ upper n.	<2.3	>2.3
Wbc	<1000	>1000
Type	Lymphocytes	Mixed
Rbc	Few	Variable
Glucose	=serum	Decreased
Cholesterol	<55	>55





A 3D grid of spheres on a blue background. The spheres are arranged in a regular, repeating pattern that recedes into the distance, creating a perspective effect. The spheres are light blue and have a slight shadow, giving them a three-dimensional appearance. The background is a solid, dark blue color.

● All the best...