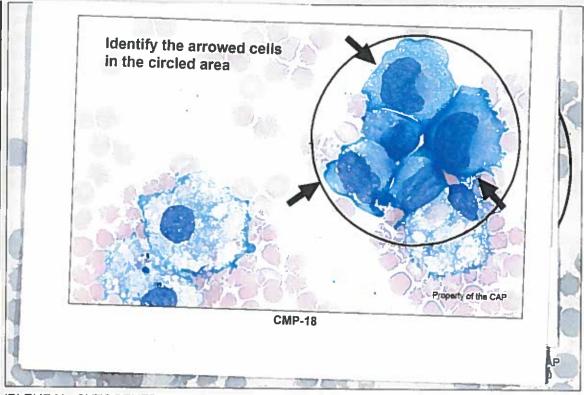
## **Body Fluid Photographs**



(PLEURAL, CYTOCENTRIFUGE, WRIGHT-GIEMSA, 100X)

CMP Referees		CMP Participants		Performance	
No.	%	No.	%	Evaluation	
26	47.3	1807	47.5	Non-consensus	
12	21.8	820	21.6		
8	14.6	540	14.2		
5	9.1	257	6.8		
2	3.6	159	4.2		
-	-	99	2.6		
	No. 26 12 8 5	No. %  26 47.3 12 21.8 8 14.6 5 9.1	No.     %     No.       26     47.3     1807       12     21.8     820       8     14.6     540       5     9.1     257       2     3.6     159	No.         %         No.         %           26         47.3         1807         47.5           12         21.8         820         21.6           8         14.6         540         14.2           5         9.1         257         6.8           2         3.6         159         4.2	

The arrowed cells are malignant cells (non-hematopoietic) as correctly identified by 47.5% of participants. A variety of neoplastic cells may be found in body fluids. Their morphology is dependent on that of the primary underlying malignancy. Malignant cells may be numerous and clustered or appear as rare single cells. Cytologic features of malignant cells on cytocentrifuge preparations include high nuclear to cytoplasmic ratio, increased cell and nuclear size, irregularly shaped nuclei, atypical nuclear chromatin patterns, large nucleoli, and a tendency to form large clusters, frequently with nuclear molding. The circled cluster of cells shows malignant features such as cellular enlargement, irregular nuclear contours, prominent nucleoli, pleomorphism, and focal nuclear hyperchromasia.

6.8% of the participants identified the cells as immature/abnormal cells, would refer. This is an appropriate choice as a pathologist, etc. would subsequently review the cells for identification.

21.6% of participants incorrectly identified the circled cells as mesothelial cells. The mesothelial cell (20 to  $50 \mu m$ ) normally lines pleural, pericardial, and peritoneal surfaces. These cells can be shed individually or in