

TRAINING UPDATE

Lab Location: GEC, SGMC & WAH
Department: Core lab

Date Distributed: 7/10/2017
Due Date: 8/10/2017
Implementation: n/a

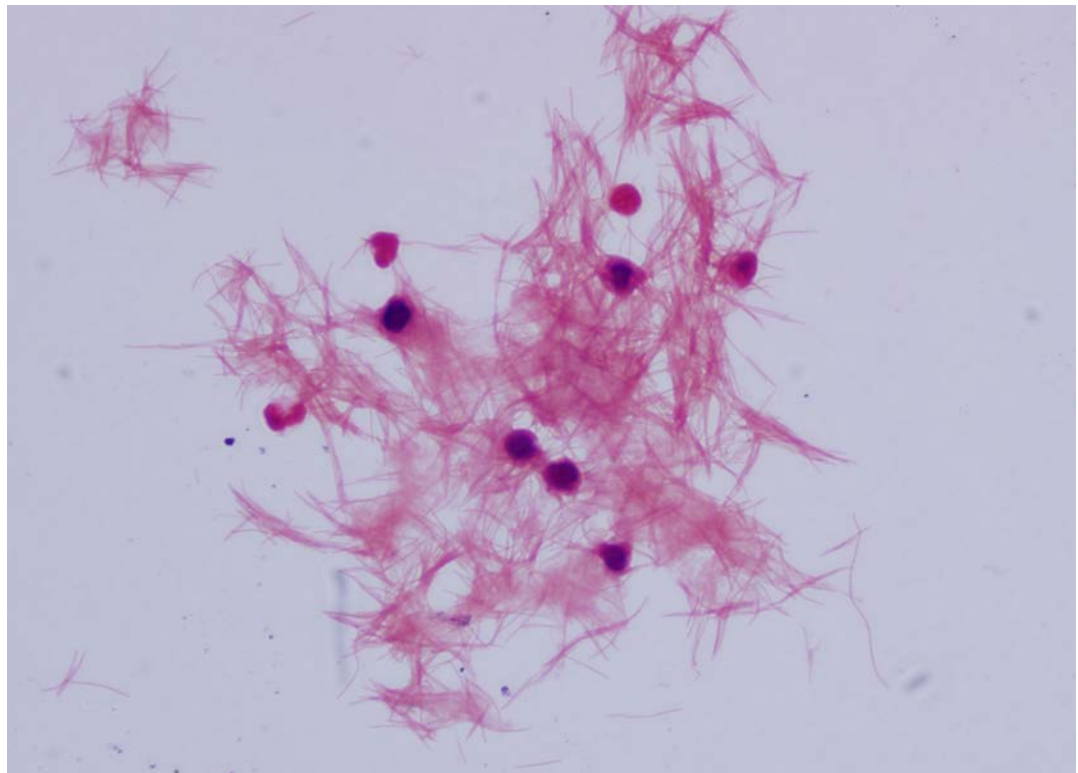
Description:

Attached is a page from the CAP participant summary for a gram stain micrograph. This was part of a recent gram stain CAP survey (D5-A).

Please review the information and then take the MTS quiz

[This update should be completed no later than August 10, 2017](#)

D5-04



Discussion

This was a simulated liver abscess from a 70-year-old female with colon cancer. This slide contained *Fusobacterium nucleatum*, which stained as gram-negative bacilli. *Fusobacterium nucleatum* is a long, thin gram-negative anaerobic bacillus, with parallel sides and characteristic tapered ends. In smears, individual bacilli may appear close together, giving the false appearance of branching. This appearance should not be confused with true branching, in which filaments are attached via the cell wall to the main parent filament. Branching bacteria most commonly encountered in clinical specimens (e.g. *Actinomyces*) are gram-positive or weakly acid-fast; gram-negative staining is not encountered. Leukocytes were present.

Stain Reaction	Referees (65)		Participants (1719)	
	No.	%	No.	%
Gram-negative	65	100.0	1658	96.5
Gram-positive	-	-	61	3.5
Morphology *				
Bacilli			1248	72.6
Branching filaments			443	25.8
Cocci			18	1.1
Cocci in pairs and chains			5	0.3
Cocci in clusters			4	0.2
Diplococci			1	0.1
Leukocytes				
Polymorphonuclear leukocytes Absent			49	2.9
Polymorphonuclear leukocytes Present			1661	97.1

* Morphology was not graded due to lack of participant consensus- Code 27.