**Question 3 – September 14**

Emperipolesis (active penetration by one cell into and through a larger cell) be seen in what disease condition?

A. Wilson disease  
B. GVHD  
C. Celiac disease  
D. Autoimmune hepatitis  
E. Ulcerative colitis  

**Answer: D**

A recent paper evaluating characteristic patterns of liver injury suggestive of autoimmune hepatitis found that the typical histology comprising all four features, interface hepatitis, portal lymphoplasmacytic infiltrate, rosette formation, and emperipolesis, was observed in 56% of AILD. Rosette formation and emperipolesis were associated significantly with the diagnosis of AILD. Rosette formation alone or in combination with emperipolesis or lymphoplasmacytic infiltrate had high specificity (96.2% each) but low sensitivity (68, 60, and 60%, respectively) for AILD. The diagnostic accuracy of typical histology comprising of a combination of at least three of four features, rosette formation, emperipolesis, and lymphoplasmacytic infiltrate, was 76.9%, with a positive predictive value of 93.3% and a negative predictive value of 70.2%. Thus, of all the choices, choice D is correct.

**Reference:**  