Question 22 – December 30

According to the new Chicago classification system, which of the following values defines Jackhammer esophagus, assuming IRP is normal:

A. Any swallow with distal contractile integral (DCI) greater than 10,000 mm Hg-s-cm; normal IRP
B. Any swallow with distal contractile integral (DCI) greater than 8000 mm Hg-s-cm; normal IRP
C. Any swallow with distal contractile integral (DCI) greater than 5000 mm Hg-s-cm; normal IRP
D. Any swallow with integrated relaxation pressure (IRP) greater than 15 mm Hg
E. Any swallow with integrated relaxation pressure (IRP) less than 15 mm Hg

According to the new Chicago classification system, which of the following values defines hypertensive peristalsis, previously known as nutcracker esophagus:

A. Any swallow with distal contractile integral (DCI) greater than 10,000 mm Hg-s-cm; normal IRP
B. Any swallow with distal contractile integral (DCI) greater than 8000 mm Hg-s-cm; normal IRP
C. Any swallow with distal contractile integral (DCI) greater than 5000 mm Hg-s-cm; normal IRP
D. Any swallow with integrated relaxation pressure (IRP) greater than 15 mm Hg
E. Any swallow with integrated relaxation pressure (IRP) less than 15 mm Hg

Answer: B, C

DCI characterizes the vigor of contraction. Jackhammer esophagus is defined by a normal IRP and an abnormally vigorous contraction **never** seen normally. Hypertensive peristalsis (nutcracker) is now defined as DCI greater than 5000 mm Hg-s-cm, which is rarely seen in normal individuals (in setting of normal IRP).

References

1. Bredenoord AJ, et al. Chicago classification criteria of esophageal motility disorders defined in high resolution esophageal pressure topography. *Neurogastroenterol Motil.* 2012 Mar;24 Suppl 1:57-65.