

Pelvic Floor Electrophysiology Patterns Associated with Obstructed Defecation

Authors : Emmanuel Kamal Aziz Saba, Gihan Abd El-Lateif Younis El-Tantawi, Mohammed Hamdy Zahran, Ibrahim Khalil Ibrahim, Mohammed Abd El-Salam Shehata, Hussein Al-Moghazy Sultan, Medhat

Abstract : Pelvic floor electrophysiological tests are essential for assessment of patients with obstructed defecation. The present study was conducted to determine the different patterns of pelvic floor electrophysiology that are associated with obstructed defecation. The present cross sectional study included 25 patients with obstructed defecation. A control group of 20 apparently healthy subjects were included. All patients were subjected to history taking, clinical examination, proctosigmoidoscopy, lateral proctography (evacuation proctography), dynamic pelvic magnetic resonance imaging, anal manometry and electrophysiological studies. Electrophysiological studies were including pudendal nerve motor conduction study, pudendo-anal reflex, needle electromyography of external anal sphincter and puborectalis muscles, pudendal somatosensory evoked potential and tibial somatosensory evoked potential. The control group was subjected to electrophysiological studies which included pudendal nerve motor conduction study, pudendo-anal reflex, pudendal somatosensory evoked potential and tibial somatosensory evoked potential. The most common pelvic floor electrodiagnostic pattern characteristics of obstructed defecation was pudendal neuropathy, denervation and anismus of external anal sphincter and puborectalis with complete interference pattern of external anal sphincter and puborectalis at squeezing and cough and no localized defect in external anal sphincter. In conclusion, there were characteristic pelvic floor electrodiagnostic patterns associated with obstructed defecation.

Keywords : obstructed defecation, pudendal nerve terminal motor latency, pudendoanal reflex, sphincter electromyography

Conference Title : ICS 2015 : International Conference on Surgery

Conference Location : Paris, France

Conference Dates : July 20-21, 2015