Motility Curriculum

The one month rotation on the Motility Service will provide training to all Fellows in the gastroenterology Fellowship Program. This training is designed to develop a basic understanding of and familiarity with GI motility; its usefulness, limitations, and basic principles, as well as a hands-on opportunity to perform motility studies under the direction of the motility nurse technician and faculty. The evaluation of and management strategies for dyspepsia, constipation and irritable bowel syndrome will also be incorporated into this rotation in order to build upon the Fellow’s previously gained knowledge in these areas.

Goals & Objectives

At the completion of this rotation, the Fellow should have knowledge of and be able to identify the following:

a) Typical and atypical manifestations of GERD
b) Differences between upright and supine reflux
c) Interpret ambulatory pH studies utilizing the Johnson-DeMeester scoring system
d) Causes and evaluation of non-cardiac chest pain
e) Basic performance of esophageal manometry
f) Basic performance of anorectal manometry
g) Basic performance of ambulatory pH monitoring
h) Indications, usefulness, limitations and contraindications of these motility studies
i) Normal esophageal and anorectal manometric findings
j) The manometric diagnostic criteria for:
   1) achalasia and its variants
   2) diffuse esophageal spasm
   3) nutcracker esophagus
   4) scleroderma esophagus
   5) non-specific esophageal motility disorders
   6) Hirschsprung’s disease
k) Pre-operative evaluation for fundiplication
l) Treatment options for dysmotility disorders
m) non-ulcer dyspepsia and its subtypes
n) Gastroparesis and its etiologies
o) Nuclear medicine gastric emptying studies; normal values, its role in dysmotility evaluation and limitations
p) Irritable bowel syndrome subclassifications and in directing therapeutic strategies
q) Constipation subtypes; colonic inertia, outlet syndromes, chronic intestinal pseudoobstruction, visceral neuro- and myopathies
r) Initial evaluation of constipation
s) Use of radiographic marker studies in constipation evaluation
t) Use of defecography and anorectal manometry in constipation
u) Treatment options in constipation
Methods of Teaching / Requirements

During this rotation, the Fellow is required to:

a) Devote one half of each workday to the Motility Service. This schedule will be flexible enough to permit other required activities during the rotation.
b) Be present at and help perform, with the motility nurse technician, all motility and pH studies during that month.
c) Interpret and provide an initial diagnosis on all studies, with faculty input and review
d) Read and become familiar with required reading material. These review articles and monographs will be given to the Fellow on the first day of the rotation.
e) Didactic sessions will be provided during the rotation. These will occur as informal discussion during tracing interpretation with faculty and review of motility procedures with the nurse technician. The Fellow is expected to devote appropriate time to self-study of the provided material to reach the goals outlined above.
f) The motility nurse technician will be an important source for learning the basic principles of GI motility. The Fellow will be expected to devote adequate time and attention to these interactions.

Method of Evaluation

a) A test, to include motility interpretation, will be given at the end of the rotation to assess the Fellow’s attainment of the stated goals.
b) An evaluation of competence in the basic principles of GI motility will be provided to each Fellow by the faculty at the completion of the rotation and forwarded to the Division office.