What are the Key Questions Which Aid in the Diagnosis of Dyssynergic Defecation

Monthira Maneerattanaporn MD, Jason Baker[1] BS, Richard Saad[2] MD, William D.Chey[1,2] MD
[1]Gastro-Intestinal Physiology Laboratory, University of Michigan;[2]Division of Gastroenterology, University of Michigan

BACKGROUND

- **Chronic constipation (CC) is one of the most common GI diseases.**
- **Consequences of CC are a reduction of both QOL (Quality of Life) and an increase in utlization of health resources.**
- **Up to 30% of CC patients (pts) have dyssynergic defecation (DD)**
- **70-80% of DD pts improve with Biofeedback Therapy (BT)**
- **Common diagnostic Tests for DD include Anorectal Manometry (ARM) and Balloon Expulsion Test (BET)**
- **Clinical complaints likely to identify pts with DD have not been well characterized.**

AIM

To identify key clinical questions which are significant of DD defined by abnormal balloon expulsion testing

METHODS

- 142 pts were recruited in the study in retrospective fashion.
- All questions were answered using a 5 point scale (0- never to 4- Always).
- The sum scores were used as a continuous independent variable with higher scores indicating a higher likelihood of DD.
- Logistic regression analysis was used to identify the questions most predictive of DD (defined as a BET >60 seconds).

Pts who underwent BET for complaint of CC

Complete a modified PAC-SYM[1] survey

Complete additional 4 specific questions [2]

A. Do you have to insert your finger into your rectum to have or complete a bowel movement (BM)?
B. Do you have to insert your finger/s into your vagina to help to have or complete BM?
C. Do you have to press around your anal opening to have or complete BM?
D. Do you have difficulty passing a BM even when stools are loose or liquid?

[1] PAC-SYM: The Patient Assessment of Constipation Symptoms questionnaire is a 12-item self-report instrument divided into abdominal, rectal and stool domains.
[2] The 4 additional questions were developed from the existing literature, expert & pt opinions with the hope of better identifying patients with DD

RESULTS

- 50 of 142 (35%, 41 Female , mean age = 49.5 yrs (17-90)) pts had dyssynergic defecation. The main results of our analyses are summarized in the table.

Predictors of dyssynergia defined by abnormal BET			
Variable	Estimate OR	95%CI	P-value
BET vs D	1.339	1.042-1.720	0.0225*
BET vs q12	1.397	1.079-1.811	0.0113*
BET vs D+q12	1.267	1.079-1.488	0.0038*
BET vs D+q5+q12	1.226	0.949-1.586	0.1193
BET vs sumtotal	1.033	0.995-1.037	0.0925
BET vs pacsum	1.028	0.989-1.069	0.1590
BET vs q4sum	1.080	0.940-1.242	0.2759

- Question 12: Feeling like you had to pass a BM but you couldn't
- Question D: Do you have difficulty passing a SM even ehen the stools are loose or liquid?
- Question 12 and Question D were found to be predictive of DD
- Combining the scores of questions 12 & D was also predictive of DD (OR=1.267).
- Total score from the PAC-SYM and/or the 4 additional questions were not predictive of DD

CONCLUSION

We identified two questions which can used in the office to screen for Dyssnergic Defecation:
1. Feeling like you had to pass a BM but you couldn't
2. Do you have difficulty passing a BM even when the stools are loose or liquid?