different symptom phenotype than white patients with gastroparesis. For the whole group, symptoms had the greatest impact on quality of life. In particular, bloating, fullness/satiety, and upper abdominal pain had the strongest negative correlation with quality of life.

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Cross-Sectional Study of Irritable Bowel Syndrome in an Urban, Minority Population Temple Registry for the Investigation of African American Gastrointestinal Disease Epidemiology (TRIAGE)

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Purpose: Irritable Bowel Syndrome affects 11.6% (3-20%) of the U.S. population. Limited information exists about the epidemiology of IBS in black Americans. Psychological co-morbidities are likely important contributors to the development of IBS in this population. TRIAGE is a cross-sectional survey of primarily black Americans living an impoverished section of Philadelphia. The aims of this study were to: 1) Estimate the prevalence of IBS in the TRIAGE database and; 2) Identify factors associated with IBS in this unique study group.

Methods: Adults residing in a single zip code of North Philadelphia were recruited using geographical mapping. Invited participants completed a comprehensive computer-based questionnaire with the assistance of a researcher. We gathered comprehensive demographics, medical history, and diet composition. We queried lifestyle practices (Alcohol Use Disorder Identification Test-AUDIT, The Drug Abuse Screening Test -DAST, Fagerstrom Tobacco Abuse) as well as the presence of depression (Patient Health Questionnaire-PHQ-9) and post-traumatic stress-PTSDQ. QoL was assessed using SF-36 v2. Subjects completed the entire Rome III survey for functional bowel disorders. Data were collected in Microsoft Access and analyzed in IBM SPSS Statistics 19.0.

Results: To date, 214 (95.3% black American) subjects have been recruited. Nineteen (8.9%) subjects were found to have IBS by Rome III Criteria. There were no statistical differences with respect to age, income, level of education, smoking, harmful drinking, and drug abuse between those with and without IBS. However, IBS patients were more likely to be female (84.2% vs. 15.8%, p=0.009), divorced (31.6% vs. 8.7%, p=0.003), have depression (72.2% vs. 31.4%, p= 0.002), and have PTSD (42.1% vs. 15.9%, p=0.005). Norm adjusted QoL scores for physical functioning and mental health were substantially lower in those with IBS than unaffected subjects (PF: 39.5 ± 13.4 vs. 47.5 ± 11.0, p=0.004; MH: 40.5 ± 12.8 vs. 49.4± 11.6, p=0.002).

Conclusion: Approximately 9% of African-American subjects living in North Philadelphia have IBS comparable to other studied populations. TRIAGE IBS patients were more likely to be female, divorced, have depression, and have a lower QoL in both the mental and physical domains. The prevalence of PTSD in this group was substantial-identification and treatment are likely to be paramount in the care of this vulnerable population.

1312

A New Surgical Innovation for Chronic Constipation (Jinling Procedure): 2 Years Follow-up

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Purpose: Surgery is indicated for chronic constipation, which is refractory to conservative therapy. Of the three different types of constipation, the treatment of slow-transit constipation combined with outlet obstruction is controversial. This study proposed a surgical innovation, Jinling procedure, of which the safety, effectiveness and quality of life was examined over a 2-year follow up.

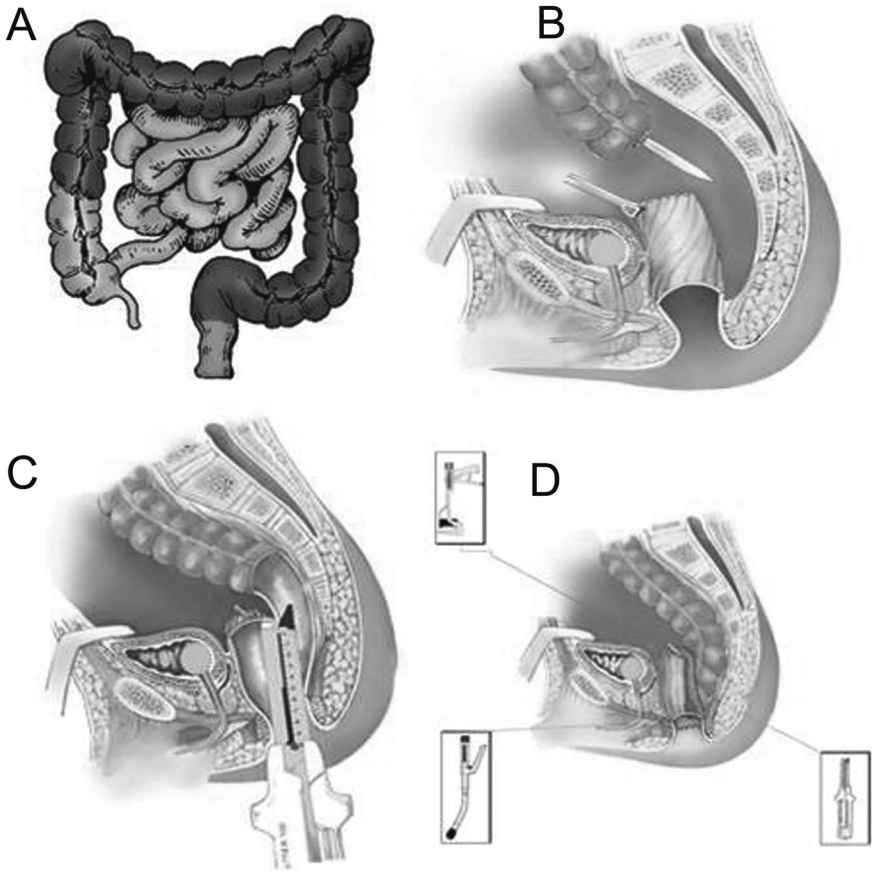
Methods: Patients with refractory slow-transit constipation associated with outlet obstruction was strictly included. All received Jinling procedure, which added a new side-to-side anastomosis to colorectal posterior anastomosis after subtotal colectomy. Primary outcomes include safety (morbidity and adverse events), effectiveness (Wexner constipation score and satisfaction rate), and Gastrointestinal Quality of Life Index (GIQLI) documented at baseline and at 3, 6, 12 and 24 months.

Results: Between Jan 2005 and Jun 2009, of the 304 patients, 214 (70.4%) received laparoscopic-assistant Jinling procedure; the other 90 (29.6%) received open Jinling procedure. 130 (42.8%) patients had previous surgical intervention without improvements. A total of 107 complications and adverse events were reported in 82 patients (morbidity rate of 35.3%). Most complications were managed conservatively. A significant reduction in Wexner constipation score was observed between baseline (mean 19.9) and 3 months (mean 8.3), which was maintained at 24 months (mean 4.4, p<0.001). Improvement

General information	Number
Total patients number	304
Gender (F/M)	244/60
Mean onset age (years old)	31.4 (rang 1–76)
Duration of disease (months)	156.5 (rang 2–720)
Mean length of hospitalization (d)	18.4 (rang 6–99)
Length of stay after surgery (d)	12.4 (rang 4–92)
Mean operative time (min)	
Open vs. Laparoscopy	156 (range 113–212) vs. 188 (range 157–251)
Previous procedures	
Partial colectomy	8
Ileostomy	1
Colostomy	3
Lysis of adhesions	15
Colectomy to remove fecalith	11
Appendectomy	28
Cholecystectomy	6
Upper gastrointestinal procedures	3
Hemorrhoidectomy	11
Gynecological procedures	30
Anal procedure (Rectopexy, Stapled transanal rectal resction)	14

Table 2. Safety data: morbidity and adverse events

Complications and adverse events	Number (percentage)
Anastomotic bleeding	24 (7.9%)
Anastomotic leakage	9 (3.0%)
Postsurgical stenosis	0
Urinary retention	Urinary retention
Anal fissure	0
Sexual dysfunction	2 (0.7%)
Fecal incontinence	0
Constipation	1 (0.3%)
Small bowel obstruction	30 (9.9%)
Serious septic complication requiring fecal diversion	0
Overall	107 (35.3%)



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in constipation score was matched by an overall improvement in GIQLI at 6- , 12- and 24-month follow-up.

Conclusion: Our clinical practice demonstrates that Jinling procedure is safe and effective for refractory slow-transit constipation associated with outlet obstruction, with minimal major complications, significant improvement of quality of life and high satisfaction rate after two-year follow up.

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Effect of Methylnaltrexone on Anorectal Function in Patients with Opioid-induced Constipation

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Purpose: Opioids induce constipation through their effects on central and peripheral regulation of neuromuscular functions. Anorectal manometry (ARM) is a non-invasive procedure that helps explain the mechanism of constipation. Methylnaltrexone (MNTX) is a peripherally acting opioid antagonist approved for the treatment of opioid-induced constipation in patients with advanced illness. The aim of this study was to determine the effect of MNTX on anorectal function in patients with opioid-induced constipation.

Methods: This is a prospective observational study. Subjects were enrolled from the Pain Management Center and the Gastroenterology Clinics. Patients were considered to have opioid-induced constipation if they had been on opioids and report symptoms of constipation by Rome III criteria. All patients had ARM before and four hours after administering MNTX. Rectal sensory functions were determined by intra-rectal balloon inflation. Prior to treatment patients were asked about constipation symptoms during the preceding 3 months. During the treatment phase, patients received MNTX subcutaneously based on their body weight. The response to treatment was evaluated by using constipation symptom rating questionnaire.

Results: Four patients (Men=2, mean age= 52 (range 46-62) with chronic-non-malignant pain and opioid-induced constipation were studied. Anal sphincter pressures were normal before and after treatment with MNTX. All patients had rectal hyposensitivity to first sensation which worsened after treatment. Urge and maximum tolerable volume were normal before treatment and remained normal in all four patients after treatment. All four patients had paradoxical contraction on simulated defecation and did not change after treatment. Three patients could not evacuate the rectal balloon before treatment. One patient who could not evacuate the balloon before treatment did so after treatment. Except for one patient who did not have any pretreatment pain, all remaining patients had less pain after treatment. There was improvement in all symptoms of constipation and overall feeling of satisfaction in all four patients after treatment (Table 2).

Conclusion: There was no observed clinically significant change in ARM attributed to MNTX. There was improvement in all symptoms of constipation after treatment with MNTX in all patients; with laxation approximately one half-hour after treatment. Because this was a descriptive study involving only four patients, statistical analysis is not appropriate. The results support MNTX working primarily at mu receptors inasmuch as there was no effect of the drug on anorectal function.

Disclosure: Ashok Tuteja; Grant support Wyeth.

This research was supported by an industry grant from Wyeth Pharmaceuticals Inc.