

1

## Faculty/Presenter Disclosure

**Presenter:** Robert Bailey

**Relationships that may introduce potential bias and/or conflict of interest:**

- **Grants/Research Support:** Intercept Pharma, Tobira Therapeutic, Abbvie, Inventiva
- **Advisory Board Member:** Gilead, Abbvie, Takeda, Merck, Janssen

2

## Colonoscopy is here to stay!

- Colon Cancer is the second most likely cause of cancer related death
- Colonoscopy screening has contributed to declining mortality rate by as much as 53% in the USA
- The Colorectal screening rate among people 50 to 74 years of age in North America is only 55 to 58%
- There are more colonoscopies to be done

American Journal of gastroenterology 2018

3

## So .....

Your patient has been referred for a colonoscopy  
And you want to do a good job.

Here comes a few thoughts to consider

Be certain your patients wants you to a good job  
but also be certain they are anxious  
at times very anxious

4

## Your Anxious Patient

- 50% of patients have pre-colonoscopy anxiety moderate to severe
- Why? They are concerned about
  - The preparation** - Heard its terrible
  - The test** -  
Embarrassment, Pain, Complications, Sedation
  - The diagnosis** – Fear of cancer

American Journal of gastroenterology 20 18

5

## Official Anxieties Plus... “the day of” anxiety

- It was difficult to find parking
- Parking was expensive
- I’m going to be late
- The test has been delayed I am now late
- Nurse reminded me I should not drive the kids to school tomorrow
- I know parts of me will be exposed during this test
- Then the doctor he told me it would be possible to perforate my colon,... and I might have to go to the operating room to fix it... but,... I better have it done.

6

## Bailey's Today Tip # 1

**TALK TO THE PATIENT, DEVELOP A RELATIONSHIP  
IDENTIFY THE CONCERNS  
TALK ABOUT THEM**

- Before the prep - give good information
- In the room - remember the worries and address them.... embarrassment, pain, the procedure, the rarity but importance of finding cancer

Take time to ask a few personal questions  
to show the patient you too are human  
and understand the concerns  
and that you are more than open to talk.

7

## Bailey's Second Tip



8

## Alberta Colon Preparation

Your doctor will recommend a medicine for you to use to prepare for your colonoscopy, most likely be a prescription laxative tablet and/or a laxative powder that you will mix with 4 L (1.1 gal) of water.

Drink this solution over 1 to 2 hours before the test.

This solution may make you feel sick to your stomach.



Health Information and Tools > Colonoscopy

Edited by RJB

9

## The Preparation

The American Society of Gastrointestinal Endoscopy recommends bowel preparations be individualized for each patient based on efficacy, cause, safety, and tolerability

Maybe every cathartic works

Gastrointestinal Endoscopy 2015

10

## **Bailey Tip #2- Use the Bailey Prep- Its effective and much easier**

Clear fluids the day of prep

- Milk magnesia 30 mls per hour x 3
- 500 mls any clear fluids every hour x 3  
( Soup, Tea, Ginger ale, coffee, Gin and tonic)
- Docolax 10mgs po once every 3rd hour

Do the above 3 times

The timing depends on the time of the colonoscopy

11

## **Lets Get To The Scoping Tips!**

- Four simple measures taken together improve adenoma detection ( 7.6% improvement)

- 1) Taking more than six minutes on withdrawal
- 2) Retro flexing in the rectum
- 3) Buscopan use routinely to abolish peristalsis
- 4) Position change to optimize colon exposure

Quality Improvement Study: Endoscopy 2015  
F1000 Research 2019

12

**Bailey's Today Tip #3-**  
**Do the 4 simple measures and improve your skills and effectiveness**  
(adenoma detection improvement 7.6%)

- 1) Taking more than six minutes on withdrawal
- 2) Retro flexing in the rectum
- 3) Buscopan use routinely to abolish peristalsis
- 4) Position change to optimize colon exposure

Quality Improvement Study:Endoscopy 2015  
F1000 Research 2019

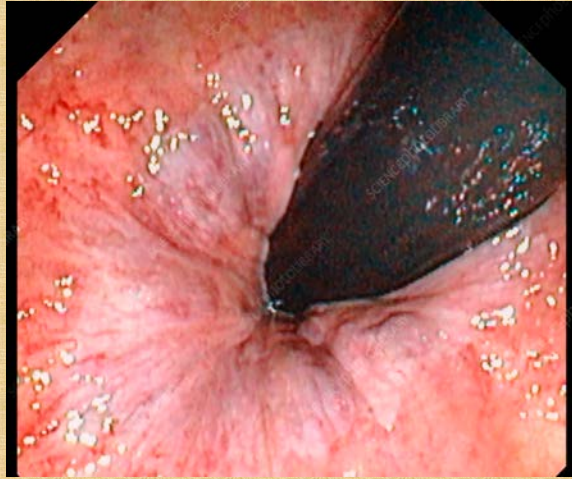
13

**Colonoscopy**  
**You need to see the rectum in retroflexion**



14

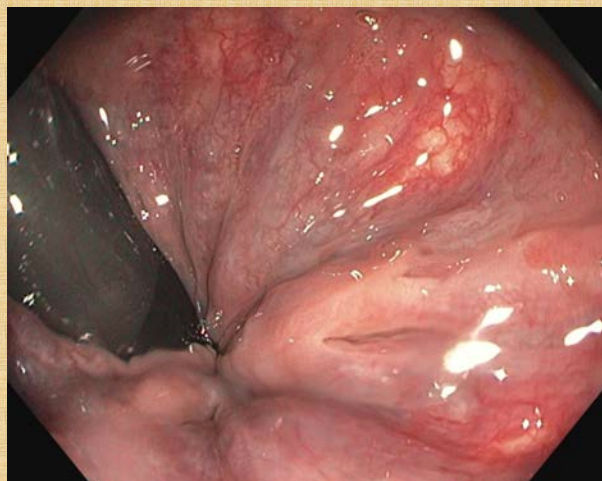
## The Rectum in Retroflexion



Science photo Library

15

## The Rectum in Retroflexion



ColonExplorer

16

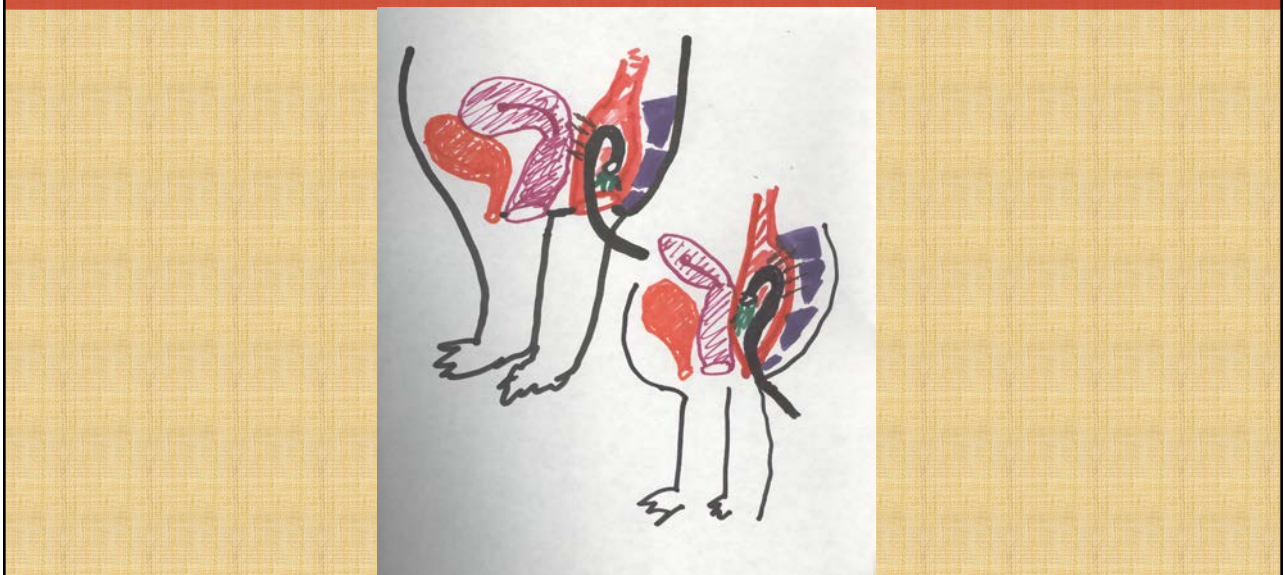


## The Rectum in Retroflexion



17

## The Rectum in Retroflexion



18

## Bailey's Tip of the Day #3

RETROFLEX IN THE RECTUM  
WITH "THE BEND" AGAINST THE SACRUM



19

## The Colon Is Often In Spasm Buscopan?

- Buscopan- anticholinergic- excellent safety profile, avoid in severe cardiac disease
- Shorten cecal intubation rate and better ileal intubation success-suggested
- No major pain influence
- Benefit when colonic spasm
- Polyp rate may be marginally improved

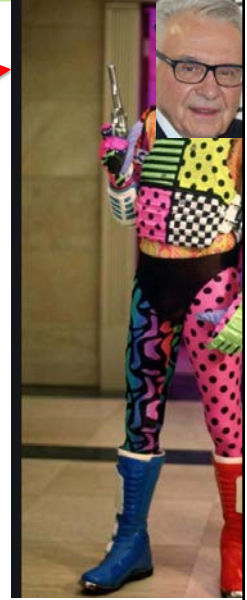
Therap Adv Gastroenterol 2017  
Science Direct 2018  
Frontline Gastroenterol 2018

20

## Lets Look At Positional Change

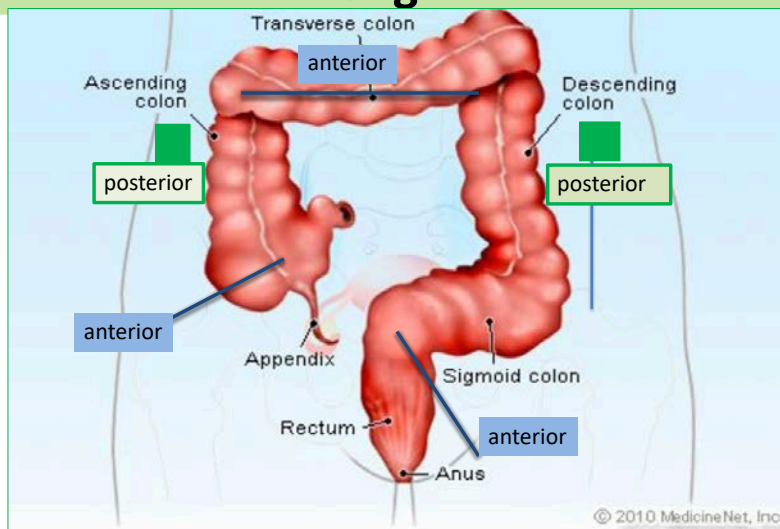
The colon anatomy is just a little trickier than you thought!

The Trickster



21

## The colon anatomy is just a little trickier than you thought.



22

## Impact of the supine position versus left horizontal position on colonoscopy insertion: a 2-center, randomized controlled trial

- A total of 347 patients were randomized to the Supine group (175) or the Left Horizontal group (172).
- The Cecal intubation time in the Supine group was significantly shorter by 41 seconds ( $P < .001$ ).
- The Descending colon intubation time was also shorter- by 10 seconds ( $P = .001$ ).
- The supine position had less pain, less difficulty, less need for positional change, and less need for abdominal compression
- As an economical and convenient method, the supine position can reduce time to the cecum, ease pain, and improve patients' acceptance of colonoscopy.

Gastrointestinal Endoscopy  
Volume 89, Issue 6, June 2019,

23

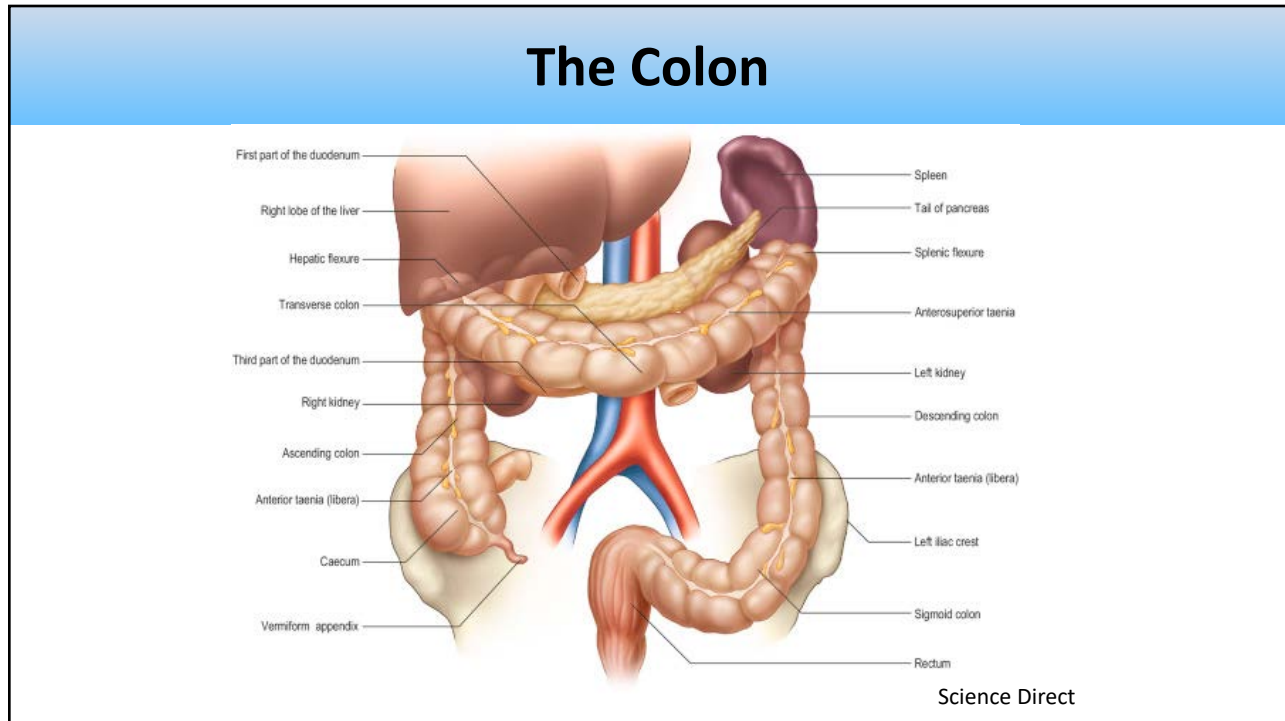
## Descending Colon Intubation



CIT= Cecal Intubation Time

Gastrointestinal Endoscopy  
Volume 89, Issue 6, June 2019,

24



25

## Cecum Position Change

L Lateral

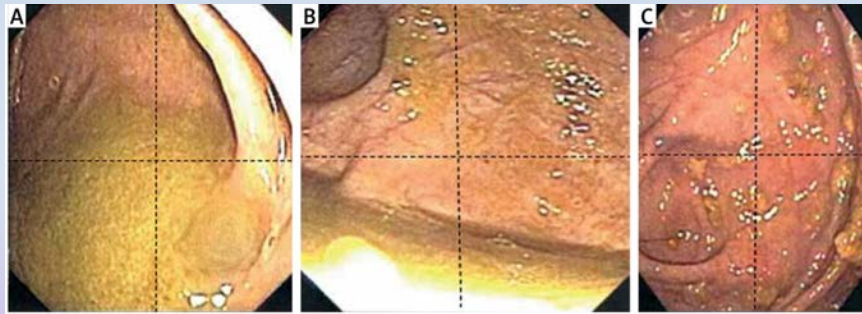
Adenoma detection  
in R colon  
Increased 9.3% in  
359 patients with  
position change

R Lateral

Przegląd Gastroenterologiczny Review 2017

26

## Position often gets a better look at the cecum



Left lateral

Supine

Right Lateral

An additional 9.3% (11/118) of adenomas were detected in caecum and ascending colon following position change

Przeład Gastroenterologiczny Review 2017

27

## Bailey's Tip Again- Do The 4 Suggestions

- Take your time withdrawing (6 Min)
- Retroflex in rectum
- Use Buscopan for any unwanted contractions
- Position the patient for better viewing- (even when they are deeply sedated)

Gastrointestinal Endoscopy 2019)

28



## Then Ask Yourself Is There Any Need For Abdominal Pressure?



The Yoga Folks think so

The Glowing Body Yoga Studio  
Knoxville USA

29

## Tricky As It Is The Colon Can Be Even Trickier at Colonoscopy

- 91% colonoscopies develop a loop
- 79% N-loop in sigmoid
- 34% deep transverse colon
- 69% incorrectly diagnosed by the endoscopist
- Women more loops than men

Gastrointestinal Endoscopy 2000

30

## Left Sided -- Loops And Troubles

- Post pelvic surgery
- Severe diverticular disease
- Slender women

## Right Sided -- Loops And Troubles

- Obese patients
- Tall men

Waye, Athens Post Grad course 2017

31

## Sigmoid Loops – The Most Frequent Cause Of Trouble



The alpha loop and the N loop

32



### Abdominal Pressure in difficult colonoscopies Where to push.

Patient can be on Left side or Supine

33

### Abdominal Pressure in difficult colonoscopies Where to push

Patient can be on Left side or Supine

34

### Abdominal Pressure in difficult colonoscopies Where to push



Left colon  
Keep trying

35

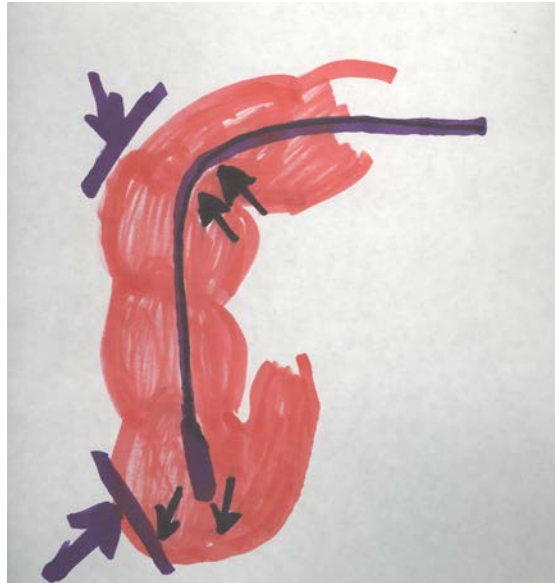
### Abdominal Pressure in difficult colonoscopies Where to push



Hands below the ribs for support,  
then pressure  
Best with 2 hands

You find the best spot  
Good Luck.

36



Abdominal  
Pressure  
in difficult  
colonoscopies  
Where to push

Support below the ribs

Different area  
Right lower quadrant

37

## Abdominal Pressure in difficult colonoscopies

- Keeps loops straight
- Prevents formation of big loops
- May advance the endoscope
- Abdominal pressure and positional change works 52% of the time

Waye, Athens Post Grad course 2017  
Gastrointestinal Endoscopy 2000

38

## Bailey Tip #4

**Be Certain The Endoscopist And The Pusher Communicate.**

39

Are There Any Tips To Make You Even Better?

Yes there are !



Original Thumb RJB

40

## The Endocuff



41

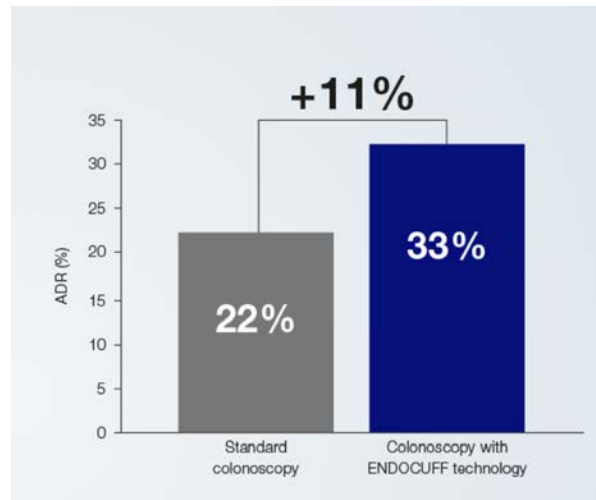
### Endocuff Vision and Colonoscopy Performance

- ❖ 410 colonoscopies: 137 precuff, 136 with cuff
- ❖ Adenoma Detection Rate increased 16% with cuff
- ❖ Insertion Time better by 1 minute

Tsaimoulos GIE 2018

42

Effect Of Endocuff-assisted Colonoscopy  
On Adenoma Detection Rate:  
Meta-analysis Of Randomized Controlled Trials.



Endoscopy 2018

43

## The ADENOMA Randomized Control Trial

1772 patients-Endocuff vs Standard colonoscopy

Overall Adenoma Detection Rate: 36.2% to 40.9%

Fit + Screening Adenoma Detection: 50.9% to 61.7%

Cancers detected: 2.3% to 4.1%

Cecal Intubation time quicker by 1 minute

|

GUT 2019

44

## Bailey's Tip Re This Device

Endocuff –  
Effective  
and  
Efficient



45

## And Now Maybe the Biggest Tip of the Day-Lots of Water



46

## Water and lots of it

### 1) Water Immersion:

Water is used to assist insertion along with suction of air  
 There is no attempt to maximize cleanliness  
 Residual feces and water are suctioned upon withdrawal

### 2) Water Exchange:

Simultaneous water infusion and suction at the same time  
 for cleaning and maintaining a clear view on insertion

In both techniques on endoscope withdrawal,  
 water is removed and carbon dioxide or air is insufflated

47

## Water and lots of it

Water exerts a gravitational effect  
 and reduces colonic elongation  
 thereby reducing loop formation procedure discomfort  
 and sedation requirements

(Dig Endosco2015)

Water irrigation improves mucosal viewing  
 and increases abnormal detection rates

(Am J Gastro 2017)

48



## Support for Water Infusion

### Cochrane Data Base 2015

- Cecal intubation rate not improved
- Adenoma detection rate augmented
- Most obvious benefit was reduction of procedure-related abdominal pain

### Gastrointestinal Endoscopy 2018

#### Water vs Air for colonoscopy A meta-analysis of randomized controlled trials

- High adenoma detection rate,
- Cecal intubation time decreased,
- Requirements for abdominal pressure decreased

49

## Impact of water exchange colonoscopy on endoscopy room efficiency: a systematic review and meta-analysis

- Impact of water infusion colonoscopy adds for total time of two minutes to the procedure.
- There is significant improvement in patient centered outcomes
- The the bed sheets and get wet.  
Personal communication RAH Endo Nurses 2020
- Watch your shoes. Jerry Waye 2019

Gastrointes Endos 2019

50

## Water exchange colonoscopy tips and tricks

- Water infusion is the least painful insertion technique reducing pain and requirement for sedation
- Colon cleanliness is increased leading to adenoma detection rate increase overall as well as in screening colonoscopies
- Cecal intubation time is marginally longer but only a total of one or two minutes.

GIE 2019

G I E August 2019

51

## Bailey Tip of The Day

- Get using Water Infusion ie Water exchange

You will do a better job with happier patients

52



THANK YOU

RJB