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Clinical Reviews

UTILITY OF THE DIGITAL RECTAL EXAMINATION IN THE EMERGENCY DEPARTMENT: A REVIEW

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□ **Abstract—Background: The digital rectal examination (DRE) has been reflexively performed to evaluate common chief complaints in the Emergency Department without knowing its true utility in diagnosis. Objective: Medical literature databases were searched for the most relevant articles pertaining to: the utility of the DRE in evaluating abdominal pain and acute appendicitis, the false-positive rate of fecal occult blood tests (FOBT) from stool obtained by DRE or spontaneous passage, and the correlation between DRE and anal manometry in determining anal tone. Discussion: Sixteen articles met our inclusion criteria; there were two for abdominal pain, five for appendicitis, six for anal tone, and three for fecal occult blood. The DRE was shown to add no additional diagnostic information and confounded the diagnosis in acute, undifferentiated abdominal pain. The sensitivity, specificity, positive predictive value, negative predictive value, and odds ratio for the DRE were too low to reliably diagnose acute appendicitis in children and adults. No statistical differences in the number of colonic pathologies were found between stool collection methods in those with positive FOBT. The DRE correlation with anal manometry in determining resting and squeeze anal tone ranged from 0.405 to 0.82 and 0.52 to 0.97, respectively. Conclusion: We found the DRE to have a limited role in the diagnosis of acute, undifferentiated abdominal pain and acute appendicitis. Stool obtained by DRE doesn't seem to increase the false-positive rate of FOBTs, and the DRE correlated moderately well with anal manometric measurements in determining anal sphincter tone. Published by Elsevier Inc.**

□ **Keywords—digital rectal; utility; review; Emergency Department; evidence-based medicine**

INTRODUCTION

The digital rectal examination (DRE) has a longstanding history as a mainstay component in a complete physical examination (1–3). However, evidence is rarely cited to support its use or to substantiate the validity of the findings. The purpose of this review article is to search and review the literature for the utility of the DRE in evaluating acute, undifferentiated abdominal pain, suspected appendicitis, fecal occult blood, and anal sphincter tone. The use of the DRE in colorectal neoplasm and benign prostatic hyperplasia screenings is beyond the scope of this article and will not be included.

Acute, undifferentiated abdominal pain is a vague yet common chief complaint in the Emergency Department (ED). Some physicians routinely perform the DRE when evaluating abdominal pain even though the DRE has been shown to be of little diagnostic value. Similarly, the DRE has a history as a mainstay in diagnosing suspected appendicitis in children and adults with right

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lower quadrant pain (4). However, its use for diagnosing suspected appendicitis has come into scrutiny. After performing a DRE, fecal occult blood testing (FOBT) by guaiac cards has become common practice throughout all medical services, such as in the ED to look for occult gastrointestinal (GI) bleeding (5). Testing for fecal occult blood in DRE-obtained stool has been argued to be a "knee-jerk procedure" of little value (6). Longstreth proposed that trauma to the anus or hemorrhoids during the DRE and the lack of dietary restrictions before stool collection can cause potential false-positive results of FOBT, prompting needless, invasive investigations (6). In the emergent setting, assessing anal tone by DRE can be performed during the trauma survey and during neurologic examination, yet it has largely been assumed that the DRE provides good estimation of anal tone.

Methods

We identified four inclusion criteria to apply to the database searches. First, the study participants must have been adults, children, or both. Second, the participants must have had symptoms of, or a chief complaint of abdominal pain, acute appendicitis, anal sphincter tone, or fecal occult blood. Third, the participants had to have a digital rectal examination performed with the outcome documented. Fourth, the DRE had to be the major outcome in the article and had to be compared to a true or final diagnosis or compared to another reported outcome. Randomized controlled trials, meta-analyses, observational studies, clinical guidelines, editorials, and letters to the editor were considered for inclusion. Review articles, case reports, and abstracts were not considered for inclusion. The exclusion criteria were any study using the DRE to screen for benign prostatic hyperplasia or colorectal neoplasia.

The following electronic databases were searched using multiple phrases (Table 1) to ensure a comprehensive search of the literature: MEDLINE (PubMed; 1950 to present), EMBASE (1988 to present), Cochrane Library, and National Guidelines Clearinghouse. If a search term was not available in the Medical Subject Headings (MeSH) search function in PubMed, then PubMed was searched without using MeSH terms. Only the EMBASE database was searched; MEDLINE was not researched using the EMBASE search function. All of the searches from PubMed were searched in EMBASE, with no new articles. The limits for the searches were: English and Human. No publication date restrictions were applied. The bibliographic references of all the articles identified by the database screening were examined to identify new articles not identified in the searches. Although review articles and case reports were excluded, their bibliographies were searched for applicable articles. If there was a disagreement between the two authors for inclusion or exclusion of articles, we discussed the articles and more strictly applied the inclusion and exclusion criteria to reach an agreement.

Table 1. Search Terms

Digital rectal examination NOT prostate NOT neoplasms
Digital rectal examination AND abdominal pain
Digital rectal examination AND acute appendicitis
Digital rectal examination AND appendicitis
Digital rectal examination AND anal tone
Digital rectal examination AND anal manometry
Digital rectal examination AND fecal occult blood
Digital rectal examination AND hematochezia
Digital rectal examination AND bright red blood per rectum
Digital rectal examination AND melena
Digital rectal examination AND gastrointestinal hemorrhage

RESULTS

A total of 380 articles were found after searching all databases. Duplicate search results were not excluded in the final counts of the articles found from the database searches. Some articles were found with more than one search and on more than one database. After applying the inclusion and exclusion criteria, 332 articles were excluded, leaving 48 articles. The bibliographies of the 48 included articles were searched, yielding an additional 65 articles. A total of 113 articles were included for full text review with further application of inclusion criteria. Ninety-seven articles were excluded for failing to meet inclusion criteria or for the DRE not being the major outcome of the study. Of the 16 articles left for inclusion, there were two for abdominal pain, five for appendicitis, six for anal tone, and three for fecal occult blood. A flow diagram of the search strategy can be found in Figure 1, and a summary of the included articles can be found in Table 2 (3,7–21).

Abdominal Pain

Two studies were found investigating physicians' use of the DRE in medical management of acute, undifferentiated abdominal pain in the ED (7,8). The evaluating physicians performed DREs at their discretion and completed evaluation forms indicating whether the DRE results altered their diagnosis (7,8). Quaas et al. found that the DRE results altered management of acute abdominal pain in only 7% of patients, in which the alteration of management was as likely to diagnostically help (either indicate correct diagnosis or refute incorrect diagnosis) as it was to diagnostically harm (either indicate incorrect diagnosis or refute correct diagnosis) (7). Similarly, Manimaran and Galland showed that the DRE did not change management of

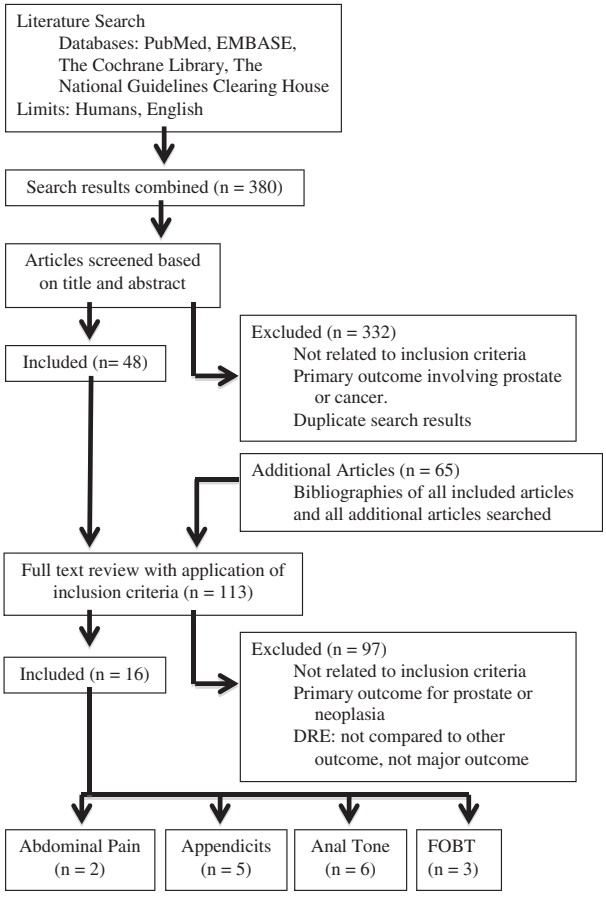

Figure 1. Summary of article selection. DRE: digital rectal examination; FOBT: fecal occult blood testing.

acute, undifferentiated abdominal pain in any of 100 patients, nor did it reveal any related pathology (8).

Acute Appendicitis

We found five articles with the DRE in diagnosing appendicitis as the major outcome of study. Bonello et al. showed low sensitivity and specificity (Table 3) for the DRE in predicting appendicitis based on right-sided rectal tenderness or mass in children and adults (9). Furthermore, the DRE was positive in only 38% of patients with appendiceal perforation (9). Similarly, Sedlak et al. showed low positive and negative predictive value and odds ratio (Table 3) for the DRE in predicting appendicitis based on generalized rectal tenderness in adults (10). Dixon et al. showed that abdominal examination findings (e.g., rebound tenderness) in adults and children have higher odds ratios for predicting appendicitis in patients presenting with acute right lower quadrant (RLQ) pain than rectal tenderness elicited by DRE (Table 4) (11). When rebound tenderness and rectal tenderness are entered into a logistical regression, rectal tenderness determined by DRE lost its statistical significance, meaning it added no additional diagnostic information to the evaluation of RLQ pain (11). Dickson et al. found a 90% diagnostic accuracy of acute appendicitis based on history and physical examination alone (12). Right-sided rectal tenderness or mass was present in 61 of 103 children with histologically proven appendicitis and in 12 of 98 children without appendicitis (12). Similarly, Dunning and Goldman found a 75% diagnostic accuracy of appendicitis when a DRE was performed in children, compared to a 90% diagnostic accuracy without the use of the DRE (13).

Fecal Occult Blood

Three studies were identified that compared two techniques of stool collection, spontaneous passed stool and stool obtained by DRE, for FOBT (14–16). The colonoscopic results for patients with positive FOBTs by the aforementioned techniques are presented in Table 5. Eisner and Lewis looked at all colonic pathology as a source of bleeding, including hemorrhoids and diverticulosis (14). Bini et al. and Rockey et al. identified colonic pathology significant for bleeding as: adenomatous polyps and adenomas >1 cm, cancer, active colitis/inflammatory bowel disease, ulcers ≥1 cm, and vascular ectasias (15,16). Hemorrhoids and diverticulosis were not considered sources of colonic bleeding in the latter two studies (15,16). Eisner and Lewis reported no statistical difference in the stool collection method but did not report the *p*-value (14). Bini et al. also found no statistical difference between stool collection methods based on the number of colonic pathology causing occult bleeding, with a *p*-value of 0.85 (15). Although Rockey et al. found a statistical significance between the two collection methods with a *p*-value <0.001, there was a higher incidence of colonic pathology causing bleeding found in the DRE cohort (16).

Anal Sphincter Tone

Six studies have compared the correlation between DRE and the gold standard, anal manometry, in predicting resting and squeeze anal sphincter tones (Table 6), and three of the five studies determined the sensitivity and specificity of resting and squeeze anal tone (3,17–21). The DRE correlation with anal manometry for determining resting and squeeze tone ranged from 0.405 to 0.82 and from 0.52 to 0.97, respectively (3,17–20). Table 7 shows the test characteristics for the DRE in determining normal anal tone and abnormal anal tone (17,18,21). The sensitivity and specificity for determining resting anal tone was 59–72% and 67–76%, respectively; whereas the sensitivity and specificity for squeeze anal tone was 72–77% and 71–97%, respectively (17,18). Dobben et al. reported sensitivities for determining abnormal resting

Table 2. Summary of Included Articles for Abdominal Pain

Sources	Setting	Number of Subjects	Age (Years)	I: Inclusion Criteria E: Exclusion Criteria	Outcome(s)*	Measurement of Outcome
Manimaran and Galland, 2004 (8)	Surgical unit	100	≥16	I: Consecutive patients with abdominal pain admitted to surgical unit E: DRE under anesthesia, patients unable to complete questionnaire	1°: Tolerance of procedure 1°: Whether DRE altered clinical dx or initial management	Prospective questionnaire analysis
Quaas et al., 2009 (7)	ED	893	≥18	I: Chief complaint of undifferentiated abdominal pain E: Vaginal/urinary complaint, flank pain, known or reported GI bleeding, pregnancy, long-term prisoner	1°: Proportion of subjects diagnostically "helped" or "harmed" by DRE results	Prospective physician completed data forms
Summary of included articles for appendicitis						
Bonello and Abrams, 1979 (9)	‡	100 395	<12 ≥12	I: patients who underwent appendectomy	1°: DRE yielding right-sided rectal tenderness 1°: Final histologic diagnosis	Retrospective chart review
Dickson and Mackinlay, 1985 (12)	Inp	210	<14	I: Inpatients for suspected appendicitis	1°: DRE yielding right-sided rectal tenderness or mass/swelling 2°: DRE on discharge	Prospective
Dunning and Goldman, 1991 (13)	Inp	48 49	Mean 11 10.4	I: Inpatients for acute abdominal pain	1°: DRE yielding right-sided rectal tenderness 1°: Final histologic diagnosis	Prospective proforma Retrospective chart rev.
Dixon et al., 1991 (11)	Inp	1204	7–87	I: Consecutive inpatients for suspected appendicitis	1°: DRE yielding generalized rectal tenderness 1°: Final histologic diagnosis	Odds ratio, multivariate analysis
Sedlak et al., 2008 (10)	ED	659	>16	I: Pain in RLQ of abdomen	1°: DRE yielding generalized rectal tenderness 1°: Final diagnosis on discharge	Letter to editor
Summary of included articles for fecal occult blood						
Eisner and Lewis, 1991 (14)	Inp	270	unk	I: Patients undergoing colonoscopy for positive FOBT; means of detection of FOBT, and pathology results in chart	1°: means of FOBT—DRE or SPS 1°: pathology on colonoscopy	Retrospective chart review FOBT: NOS
Bini et al., 1999 (15)	Otp	672	>50	I: Asymptomatic patients, no history of colon polyps or cancer or inflammatory bowel disease referred to GI clinic E: abdominal signs or symptoms	1°: Positive FOBT results after DRE or on SPS 1°: Pathology on colonoscopy	FOBT: Hemoccult II
Rockey et al., 1998 (16)	Otp	248	Mean age 61 y	I: patient referred to GI clinic for positive FOBT. E: active GI hemorrhage, iron deficient anemia, severe cardiopulmonary disease	1°: Positive FOBT results after DRE or on SPS 1°: Source of bleeding on upper and lower endoscopy	FOBT: Hemoccult II or equivalent

Summary of included articles for sphincter tone

Felt-Bersma et al., 1988 (17)	Otp	280	6–86	I: Men and women referred for investigation of anorectal function†	1°: DRE of max. basal & max. squeeze anal tone 1°: Manometry of basal and squeeze pressure	Manometry: water filled, open-tipped catheter low compliance perfusion system with pressure transducers
Hallan et al., 1989 (18)	Unk	66	19–85	I: Asymptomatic non-ano-rectum surgery, constipation, fecal incontinence	1°: DRE of max. anal squeeze & basal tone 1°: Manometry of max. squeeze & basal anal pressure 2°: Inter-rater reliability	Manometry: water-filled system with microballoon tip with pressure transducer
Kaushal and Goldner, 1991 (19)	Otp	27	Unk	I: Normal anal sphincter function or encopresis	1°: DRE of squeeze anal pressure 1°: Simultaneous manometry squeeze anal pressure	Manometry: two low-compliance water perfusion polyethylene catheters taped over gloved finger at 90°
Eckardt and Kanzler, 1993 (20)	Otp	64	Unk	I: Referral for constipation or fecal incontinence	1°: Manometry of resting & squeeze anal pressure 1°: DRE of internal & external sphincter	Manometry: station pull-through technique
Dobben et al., 2007 (21)	Otp	312	Mean age 59 y	I: Fecal incontinence for 6 mos, failure of conservative treatment E: <18 y/o, <2 y anal/rectal tumor, previous ileoanal or coloanal anastomoses.	1°: DRE of resting & squeeze anal pressure 1°: Manometry of max. resting & max. squeeze anal pressure 2°: DRE of external anal sphincter defects 2°: Endo-anal ultrasound of external anal sphincter	Manometry: solid-state or water-perfused technique with sleeve or pull-through technique
Orkin et al., 2010 (3)	Otp	303	28–86	I: Patients with defecatory concerns E: Incomplete chart	1°: DRE of resting & squeeze anal pressure 1°: Manometry of max. resting & max. squeeze anal pressures	Manometry: standard stationed pull-through technique

DRE = rectal examination; ED = Emergency Department; GI = gastrointestinal; Inp = inpatient; Otp = outpatient; RLQ = right lower quadrant; SPS = spontaneously passed stool; max. = maximum; P = pressure; mos = months; unk = unknown; FOBT = fecal occult blood test; NOS = not otherwise specified; dx = diagnosis; rev. = review.

* Separated by primary (1°) or secondary (2°).

† For complaints of incontinence, soiling, constipation, fissure, fistulae, hemorrhoids, proctitis.

‡ Retrospective chart review did not indicate location of subjects.

Table 3. Test Characteristics for the DRE in Determining Acute Appendicitis

Source	Age (Years)	Sensitivity (%)	Specificity (%)	PPV	NPV	Odds Ratio
Bonello and Abrams (9)	<12	55	75	-	-	-
	≥12	44	44	-	-	-
Sedlak et al. (10)	>16			0.446 (0.391–0.501)	0.541 (0.511–0.571)	0.945 (0.670–1.33)

DRE = digital rectal examination; PPV = positive predictive value; NPV = negative predictive value.
- Test characteristic not calculated in original article.
(95% confidence interval).

and squeeze anal tone as 72% (95% confidence interval [CI] 0.64–0.79) and 75% (95% CI 0.66–0.85), respectively (21).

DISCUSSION

The two included articles regarding abdominal pain show the DRE to be of little use in evaluating acute, undifferentiated abdominal pain. We found the DRE to not only confound but also to add no additional information to a physician's diagnosis or management. The number needed to treat to achieve one useful diagnosis based on DRE was 32 patients, which is too high to be useful for quick diagnosis in an emergent setting (7). The DRE can likely be and should be omitted as a primary assessment of acute, undifferentiated abdominal pain in the emergent setting.

We found that the DRE rarely aids the diagnosis of acute appendicitis in children or adults. Based on the test characteristics for the DRE, adults and children with a negative DRE were just as likely as those with a positive DRE to have acute appendicitis (9,10). Other review articles have also found poor test characteristics for rectal tenderness in predicting appendicitis (22,23). Dixon et al. used a stepwise logistical regression to show that no patients with histologically confirmed appendicitis only had rectal tenderness without abdominal signs (11). Jesudason and Walker, and Brewster and Herbert suggest the DRE has the potential to traumatize, especially for children, and should be performed only if the result is expected to change management, and by the most experienced clinician (4,24). The poor diagnostic potential of the DRE illustrated should preclude its use as a routine physical examination maneuver in children and adults presenting with RLQ pain suspicious for acute appendicitis. Thus, it seems permissible not to perform a DRE in the routine diagnosis of appendicitis.

The three studies evaluating stool collection method argue against DRE-obtained stool causing increased false-positive rates on guaiac FOBT (14–16). Our findings refute Longstreth's arguments that trauma to anal pathology and that lack of dietary restrictions before FOBT increase false positives among DRE-obtained stool (6). In fact, Rockey et al. actually found a higher rate of true-positive FOBTs by DRE than spontaneously passed stool based on colonic pathology thought to cause bleeding (16). Some studies looking at the detection of colonic neoplasms, specifically carcinoma, have demonstrated a lower sensitivity, specificity, positivity rate, and positive predictive value for DRE-obtained stool (1,25–27). However, these studies restricted the pathology identified to only neoplasms, whereas the studies included in this article looked at other colonic pathology thought to produce GI bleeding, which allows the included articles to be more generalizable to an ED setting.

Although the DRE did not correlate perfectly with anal manometry for either resting or squeeze anal sphincter tones, the determination of squeeze anal sphincter tone by DRE consistently correlated better with anal manometry than resting tone. Similarly, the

Table 4. Odds Ratio for Predicting Acute Appendicitis in RLQ Pain

Sign	Odds Ratio (95% CI)
Tenderness in RLQ	5.09 (2.98–9.57)
Guarding	3.07 (2.34–4.04)
Rebound tenderness	3.34 (2.55–4.40)
Abdominal rigidity	5.03 (2.69–9.88)
Right sided tenderness on DRE	1.34
Left sided tenderness on DRE	0.68
Generalized tenderness on DRE	1.03

CI = confidence interval; RLQ = right lower quadrant; DRE = digital rectal examination.

Table 5. Frequency of Colonic Lesions Found in Patients with Positive Fecal Occult Blood Tests

Source	DRE Obtained Stool (%)	SPS Obtained Stool (%)	*p*-Value
Eisner and Lewis (14)	88 (61)	84 (67)	-
Bini et al. (15)	62 (22)	83 (21.3)	0.85
Rockey et al. (16)	57 (60.6)	62 (40.3)	<0.001

DRE = digital rectal examination; SPS = spontaneously passed stool.
- No statistical value given in original article.

Table 6. Determining Anal Sphincter Tone: Correlation between Digital Rectal Examination and Anal Manometry

Source	Resting Tone	Squeeze Tone
Felt-Bersma et al. (17)	Correlation coefficient = 0.56*	Correlation coefficient = 0.76*
Hallan et al. (18)	r_s = 0.56*	r_s = 0.72*
Kaushal and Goldner (19)		Correlation coefficient = 0.97**
Eckardt and Kanzler (20)	Contingency coefficient = 0.405	Contingency coefficient = 0.520
Orkin et al. (3)	Correlation coefficient = 0.82	Correlation coefficient = 0.81

* $p < 0.001$.
** $p < 0.05$.

sensitivity and specificity for determining squeeze anal tone was higher than for resting anal tone. When performing a DRE to determine anal sphincter tone, both resting and squeeze anal sphincter tones should be assessed for a general idea of sphincter function, but the anal squeeze pressure may be a better indicator of anal sphincter function. However, anal manometry should still be considered the gold standard for determining diminished or normal anal tones.

Limitations

We found two limitations common to the included articles. First, only three of the studies blinded the investigators to the symptoms, history, and physical examination of the patient (3,19,20). Although the potential for biases existed, the nature of assessing the utility of the DRE in these topics required the investigators to know the history and physical examination of the subject participants. The blinded studies show a similar trend as the unblinded studies, and we feel minimal bias was introduced by the unblinded protocols. Second, several studies performed retrospective chart review, which introduces potential selection bias (3,9,10,13–15). Strict criteria were established as part of the study designs to avoid missing any records.

There were several limitations that were specific to the individual topics. In evaluating the DRE and abdominal pain, Quaas et al. used a convenience sample that can be less representative of the general population (7). However, they attempted to enroll as many people as possible at most hours of the day, and we feel their sample was representative of patients presenting to the ED with acute abdominal pain. Also, both Quaas et al. and Manimaran et al. did not confirm the diagnoses used by the physicians in deciding if the DRE result was useful (7,8). However, assuming only a small error in diagnosis, this practice should not have altered the outcomes of the studies. Rockey et al. performed upper endoscopy to search the entire GI tract of those with positive FOBT (16). Eisner and Lewis, and Bini et al. did not perform upper endoscopies to search a definitive source of GI bleeding if the colonoscopies were negative. Positive FOBTs have been reported due to upper GI bleeding (16,28). Thus, to fully evaluate the false-positive rates of spontaneously passed stool and DRE-obtained stool, both a colonoscopy and an upper endoscopy should be performed. Inter-rater reliability could potentially affect the manometric measurements. Although all manometry was performed using a water-perfused catheter system, inherent differences in the equipment specific to each study could still exist.

This article is mainly limited by selection bias of the included articles. Although an attempt was made to exhaustively search the medical literature with multiple phrases on multiple databases, articles were inevitably missed. Similarly, inclusion and exclusion criteria were placed to include only the most relevant and applicable articles in relation to the objectives of this paper. Some articles, which covered similar topics presented in this paper, were excluded due to limited scope of outcome, poor generalizability to the ED setting, or had outcomes not common in the ED. Overall, we feel our findings are generalizable to patients presenting to an ED with any of the four chief complaints investigated.

CONCLUSION

In conclusion, the search results of this article found the DRE to have a more limited role in the diagnosis of acute, undifferentiated abdominal pain and acute appendicitis

Table 7. Test Characteristics for the Digital Rectal Examination in Determining Normal Sphincter Tone

Source	Resting Sensitivity	Squeeze Sensitivity	Resting Specificity	Squeeze Specificity
Felt-Bersma et al. (17)	72%	72%	67%	97%
Hallan et al. (18)	59%	77%	76%	71%
Dobben et al.* (21)	0.72 (0.64–0.79)	0.75 (0.66–0.85)		

(95% confidence interval).
* Test characteristics for determining abnormal sphincter tone expressed as area under the receiver operating characteristic curve.

than current mantra dictates. We showed that DRE-obtained stool doesn't increase the false-positive rate of guaiac-based FOBTs when investigating colonic sources of bleeding other than neoplasia. Finally, we showed the DRE to correlate moderately well with anal manometric measurements in determining anal sphincter tone.

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ARTICLE SUMMARY

1. Why is this topic important?

Accurate and informative results of physical examination maneuvers are pivotal in diagnosis in the emergent setting. The literature has shown that digital rectal examination (DRE) adds ambiguous or no information and could potentially harm diagnosis in the Emergency Department (ED) when used indiscriminately.

2. What does this review attempt to show?

This review article attempts to review and present the most relevant medical literature pertaining to the use of the digital rectal examination in evaluating common chief complaints encountered in an ED.

3. What are the key findings?

In evaluating abdominal pain and suspected appendicitis, the DRE was shown to have a limited role in reaching a diagnosis. The DRE helped arrive at a correct diagnosis as equally as it helped arrive at an incorrect diagnosis, and rarely added useful diagnostic information. Testing stool obtained by DRE was not shown to increase the false-positive rate of guaiac-based fecal occult blood tests. The DRE correlates moderate well with manometric readings in assessing anal sphincter tone.

4. How is patient care impacted?

The DRE can often be a confusing, unpleasant physical examination maneuver for patients and does not definitively rule in or rule out diagnoses in certain chief complaints in the emergent setting. Discretionary use of the DRE for a small subset of patients would prevent an unpleasant, sometimes painful, examination and would prevent the results of the DRE from adding ambiguous information to diagnosis of the above chief complaints.