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Durable Approaches to Recurrent Rectal Prolapse Repair May Require Avoidance of Index Procedure

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BACKGROUND: Surgical treatment of recurrent rectal prolapse is associated with unique technical challenges, partially determined by the surgical approach used for the index operation. Success rates are variable, and data to determine the best approach in patients with recurring prolapse are lacking.

OBJECTIVE: The study aimed to assess current surgical approaches to patients with prior rectal prolapse repairs and to compare short-term outcomes of de novo and redo procedures, including recurrence of rectal prolapse.

DESIGN: Retrospective analysis of a prospective database.

SETTINGS: The Multicenter Pelvic Floor Disorders Consortium Prospective Quality Improvement database.

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De-identified surgeons at more than 25 sites (81% high volume) self-reported patient demographics, prior repairs, symptoms of incontinence and obstructed defecation, and operative details, including history of concomitant repairs and prior prolapse repairs.

PATIENTS: Patients who were offered surgery for full thickness rectal prolapse.

INTERVENTIONS: Incidence and type of repair used for prior rectal prolapse surgery were recorded. Primary and secondary outcomes of index and redo operations were calculated. Patients undergoing rectal prolapse re-repair (redo) were compared with patients undergoing first (de novo) rectal prolapse repair. The incidence of rectal prolapse recurrence in de novo and redo operations was quantified.

OUTCOMES: The primary outcome of rectal prolapse recurrence in de novo and redo settings.

RESULTS: Eighty-nine (19.3%) of 461 patients underwent redo rectal prolapse repair. On short-term follow-up, redo patients had prolapse recurrence rates similar to those undergoing de novo repair. However, patients undergoing redo procedures rarely had the same operation as their index procedure.

LIMITATIONS: Self-reported, de-identified data.

CONCLUSION: Our results suggest that recurrent rectal prolapse surgery is feasible and can offer adequate rates of rectal prolapse durability in the short term but may argue for a change in surgical approach for redo procedures when clinically feasible. See **Video Abstract**.



LOS ENFOQUES DURADEROS PARA LA REPARACIÓN DEL PROLAPSO RECTAL RECURRENTE PUEDEN REQUERIR EVITAR EL PROCEDIMIENTO ÍNDICE

ANTECEDENTES: El tratamiento quirúrgico del prolapso rectal recurrente se asocia con desafíos técnicos únicos, determinados en parte por el abordaje quirúrgico utilizado para la operación inicial. Las tasas de éxito son variables y faltan datos para determinar el mejor abordaje en pacientes con prolapso recurrente.

OBJETIVO: Evaluar los enfoques quirúrgicos actuales para pacientes con reparaciones previas de prolapso rectal y comparar los resultados a corto plazo de los procedimientos de novo y rehacer, incluida la recurrencia del prolapso rectal.

DISEÑO: Análisis retrospectivo de una base de datos prospectiva.

AJUSTE: Base de datos de mejora prospectiva de la calidad del Consorcio multicéntrico de trastornos del suelo pélvico. Cirujanos no identificados en más de 25 sitios (81% de alto volumen) informaron datos demográficos de los pacientes, reparaciones previas, síntomas de incontinencia y defecación obstruida y detalles operativos, incluido el historial de reparaciones concomitantes y reparaciones previas de prolapso.

INTERVENCIONES: Se registro la incidencia y el tipo de reparación utilizada para la cirugía de prolapso rectal previa. Se calcularon los resultados primarios y secundarios de las operaciones de índice y reoperación. Se compararon los pacientes sometidos a una nueva reparación (reoperación) de prolapso rectal con pacientes sometidos a una primera reparación (de novo) de prolapso rectal. Se cuantificó la incidencia de recurrencia del prolapso rectal en operaciones de novo y rehacer.

RESULTADOS: El resultado primario de recurrencia del prolapso rectal en entornos de novo y redo. Ochenta y nueve (19,3%) de 461 pacientes se sometieron a una nueva reparación del prolapso rectal. En el seguimiento a corto plazo, los pacientes reoperados tuvieron tasas de recurrencia de prolapso similares a los de los sometidos a reparación de novo. Sin embargo, los pacientes sometidos a procedimientos de rehacer rara vez tuvieron la misma operación que su procedimiento índice.

LIMITACIONES: Datos no identificados y autoinformados.

CONCLUSIONES/DISCUSIÓN: Nuestros resultados sugieren que la cirugía de prolapso rectal recurrente es factible y puede ofrecer tasas adecuadas de durabilidad del prolapso rectal en el corto plazo, pero puede abogar por un cambio en el enfoque quirúrgico para rehacer los procedimientos cuando sea clínicamente factible. (Traducción—Dr. Mauricio Santamaria)

KEY WORDS: Abdominal rectopexy; Perineal rectal prolapse repair; Rectal prolapse; Recurrence.

Rectal prolapse is an excruciating condition caused by progressive intussusception of the rectum through or beyond the anal canal. Symptoms of pain, mucus discharge, fecal leakage, and obstructed defecation symptoms can be debilitating and can severely limit activities of daily living and quality of life. Over time, the prolapse can progress from intermittent, emerging only with bowel movements, to complete prolapse with minimal bowel activity.¹⁻³

The cause of rectal prolapse is unclear, but the condition is associated with several anatomical features, including redundant rectosigmoid, widening of the levator hiatus, and a deep pouch of Douglas. Surgical treatments provide adequate short-term relief but are associated with high rates of recurrence, with some studies reporting recurrences in up to 30% to 50% of patients. Furthermore, the rate of recurrence increases with each subsequent repair. More than 100 different operations have been described, and surgeon preference and anecdotal evidence are key to operative decision-making owing to a lack of reliable data.^{4,5} Hence, the optimal approach to treating recurrent rectal prolapse has yet to be determined, and better data are needed to improve decision-making.

To address the paucity of data in patients undergoing de novo vs reoperative rectal prolapse surgery, members of the Rectal Prolapse Surgery Quality Improvement Collaborative created an unfunded, de-identified quality improvement (QI) data-sharing network.⁶ The data were prospectively collected and pooled from geographically diverse pelvic floor treatment centers to maximize sample size and minimize variations in surgeon experience. The overall aim of the study was to discern how specific variations in patient history or surgical technique may influence patient outcomes and to encourage data-sharing and regular data review to support the dissemination of meaningful practices that will improve the surgical care of patients with rectal prolapse.⁶

The specific aims of the present study were to 1) assess the impact of prior rectal prolapse repair on the overall success of rectal prolapse redo procedures, 2) determine predictors for successful redo rectal prolapse repair, and 3) develop data and experience-driven consensus on a rational approach to managing rectal prolapse recurrences.

MATERIALS AND METHODS

In January 2015, we invited colorectal surgeons to join a multicenter QI collaborative and engage in a pilot effort to evaluate practices in the surgical management of rectal prolapse.

Surgeons volunteering to participate in the Rectal Prolapse Surgery Quality Improvement Collaborative

were de-identified and self-reported their data by entering information online using the secure electronic REDCap (Research Electronic Data Capture) system hosted by Massachusetts General Hospital and accessed via a study-specific link: <https://tinyurl.com/rectalprolapse-prospective>. Collecting de-identified data in this fashion facilitated the participation of the de-identified surgeon volunteers without the need for data-sharing agreements with local institutional review boards. The collection of de-identified data for analysis through this site was approved by the institutional review board.

This collection method offered the advantage of faster patient accrual, along with the disadvantage that data could not be clarified or augmented. The development of this QI effort has been described elsewhere.⁶

Preoperative variables included the following patient characteristics: sex; presence of concomitant vaginal prolapse and urinary incontinence; prior pelvic floor surgery; prior rectal prolapse repair with a specific description of the type(s) of prior repair(s); and information regarding patient symptoms of fecal incontinence (as measured by a surgeon-collected Wexner Cleveland Clinic Incontinence Score) and obstructed defecation (as measured by a surgeon-documented Altomare Obstructed Defecation Symptom Score).^{7,8} *Intraoperative variables* included critical technical aspects of the procedures, such as approach (robotic, laparoscopic, open, and perineal), fixation technique (posterior suture, ventral mesh), addition of concomitant gynecologic procedures such as colpopexy, posterior repair, or colpocleisis. *Postoperative variables* were collected during the first 3 to 6 months after surgery and included a list of self-reported complications; patient hospital length of stay; patient symptoms of fecal incontinence (as measured by a surgeon-collected Wexner Cleveland Clinic Incontinence Score); and obstructed defecation (as measured by a surgeon-documented Altomare Obstructed Defecation Score). Information on early rectal prolapse recurrences was self-reported by the surgeons.

Statistical Analysis

For the purposes of this analysis, the prospectively collected data were retrospectively divided into 2 patient cohorts on the basis of whether the patient underwent de novo rectal prolapse repair or had redo surgery for a prior failed rectal prolapse repair(s). Patients were further categorized by surgical approach (ie, abdominal vs perineal) and whether they had additional maneuvers or interventions, such as concomitant abdominopelvic organ prolapse repair. Patients undergoing de novo rectal prolapse repair and patients with a history of prior failed rectal prolapse repair were then compared using univariate analysis. Additional univariate analysis was performed to compare patients who were offered a specific surgical approach.

Categorical variables were reported as frequencies and percentages and compared using χ^2 tests. Continuous

variables were reported as means and SDs and compared using the Student *t* test. All statistical tests were 2-sided, with an α level of 0.05. SAS statistical software (version 9.2; SAS Institute Inc, Cary, NC) was used for all analyses.

Data Review and Generation of Recommendations for QI

One of the main goals of QI data collection for any surgical procedure is to provide feedback to participating members to improve patient care. With this goal in mind, we invited colorectal surgeons belonging to the American Society of Colon and Rectal Surgeons (ASCRS) Steering Committee on Pelvic Floor Disorders and surgeons willing to contribute data to this QI database in an unblinded fashion, to participate in a virtual teleconference focusing on data review, interpretation, and generation of consensus QI recommendations. Fifty-seven colorectal surgeons volunteered to participate in the Zoom conference (Zoom platform, May 27, 2022) and/or voted using polling software (Slido). Surgeons were asked to review the data and then comment on their likelihood of opening a redo abdominal or perineal repair (and what type) for a patient who had previously failed a prior specific rectal prolapse repair. Not more than 1 type of repair choice was allowed. These votes were tabulated in a summary table and converted into a proposed consensus algorithm, listing those redo procedures (along with added maneuvers/interventions) that resulted in greater than 70% agreement. These recommendations are detailed in the discussion.

RESULTS

During the study period (January 2017–January 2022), preoperative and 3- to 6-month follow-up data were collected on 461 prospective patients with full-thickness, external rectal prolapse. Most patients were operated on in the United States (95%), and the majority were women (N = 408; 93.4%). The mean age of patients was 64.4 ± 18.1 years.

De Novo Rectal Prolapse Repair

De novo patients (N = 372) tended to be younger compared with patients offered redo prolapse surgery after a failed prior perineal procedure, but they were similar in age to those with a failed prior abdominal procedure. They also had fewer episodes of gas and solid incontinence and were less likely to need pads. However, obstructed defecation syndrome scores were similar to the group requiring redo surgery. These preoperative characteristics and surgical details can be found in Table 1.

De Novo Abdominal Repairs. A total of 268 patients (72.1%) underwent de novo prolapse repair via the abdominal approach, of whom 40 (15%) were offered ventral mesh rectopexy (VMR). Half of these VMR patients

TABLE 1. Comparison of patients offered de novo rectal prolapse repair vs redo rectal prolapse repair

Type of prior rectal prolapse repair, if any	De novo repair N = 372	Redo repair N = 89		p
	None	Perineal N = 46	Abdominal N = 43	
Women	354 (95.1%)	43 (93.5%)	41 (95.3%)	0.855
Age, y, mean ± SD	63.8 ± 18.5	71.3 ± 16.5	62.4 ± 14	0.026
No FI (solids)	137 (41.5%)	13 (28.9%)	13 (31.0%)	0.279
No FI (gas)	114 (35.2%)	8 (18.2%)	9 (22.0%)	0.018
No need for pads	150 (46.4%)	10 (24.4%)	9 (22.0%)	<0.001
No need to adjust lifestyle	105 (32.1%)	7 (15.9%)	4 (9.8%)	<0.001
ODS, mean ± SD	8.7 ± 5.8	9.2 ± 5.7	8.4 ± 4.8	0.986

Data presented as n (%) unless otherwise indicated. Redo repairs are divided by whether the patient failed a prior perineal or abdominal operation. FI = fecal incontinence; ODS = Obstructed Defecation Score.

(N = 20) underwent concomitant abdominopelvic organ prolapse resuspension (GYN-A) maneuvers (eg, sacral colpopexy, hysteropexy, vaginopexy). An additional 228 patients underwent posterior suture rectopexy (PSR). Of these, 79 patients had concomitant GYN-A suspensions. The cumulative rate of concomitant closure of the pouch of Douglas (CPD) with mesh, graft, or sutures (defined as the sum of PSR plus GYN-A and all VMR patients) was 44.4% (Fig. 1).

De Novo Perineal Repairs. A total of 104 (27.9%) patients underwent de novo perineal repair, of whom 75 (72.1%) were offered Delorme (perineal approach [PA]) procedures and 20 (19.2%) had concomitant vaginal pelvic organ prolapse (POP) resuspensions (GYN-P), such as colpocleisis, posterior repair, or levatorplasty (Fig. 1).

Redo Rectal Prolapse Repair

Surgical History. Eighty-nine patients (19.3%) had redo rectal prolapse surgery (Fig. 2). Of these patients, 43 (48.3%) had surgery for a prior failed abdominal repair and 46 (51.6%) had surgery for a prior failed perineal repair. In the group with a history of prior abdominal operation, 34 patients (79.1%) were operated on via a minimally invasive approach, either laparoscopic or robotic. Most of these patients had prior PSR (N = 37; 86.0%) and 16 (37.2%) had additional GYN-A POP repairs. Six patients who underwent prior abdominal repair also had prior VMR, and of these patients, 4 (66.7%) had additional GYN-A repairs. Among the 46 patients (51.7%) with prior failed perineal repairs, the majority underwent Delorme (PA) procedures. Seven patients had more than 2 prior failed perineal repairs at the time of their repeat procedure.

Redo Prolapse Repairs Offered to Patients Who Had Recurrence After Prior Abdominal Repair. Of the 43 patients who had a previous abdominal operation, 34 (79.1%) were offered repeat abdominal surgery and 9 were converted to the perineal approach (PA; Fig. 1). Seven of the 9 patients converted to a PA had concomitant GYN-P POP repair, whereas 20 patients undergoing de novo

perineal surgery had concomitant procedures (77.8% vs 19.2%, not significant). In the latter group, the rate of VMR increased to 55.8% and the percentage of patients undergoing GYN-A POP repair increased to 46.6%. This had the effect of increasing the cumulative rate of CPD with mesh, graft, or sutures at the time of redo abdominal rectopexy in contrast to the overall CPD rate noted in the de novo repairs (76.5% vs 44.4%, respectively, $p < 0.001$).

Redo Prolapse Repairs Offered to Patients Who Had Recurrence After Prior Perineal Repair. Of the 42 patients who failed a prior perineal procedure, half (N = 22) were converted to an abdominal approach for their redo operation (Fig. 1). Four of these converted patients were offered VMR and 18 (80.7%) were offered PSR. Eleven PSR patients were also offered concomitant GYN-A POP repair. Thus, the total rate of CPD with mesh, graft, or sutures in these converted redo repairs was numerically higher than the rate of CPD in de novo abdominal rectal prolapse repairs (68.2% vs 44.4%, $p =$ not significant). Twenty patients who failed a prior perineal repair were offered another redo perineal repair, but always by the Altmeier PA. The overall rate of PA in the redo perineal repair group was higher than the rate of PA in the de novo group (100% vs 27.9%, $p < 0.001$), as was the rate of concomitant GYN-P POP repairs (75.0% vs 19.2%, $p < 0.001$).

Recurrence Rates in De Novo vs Redo Patients. Rates of rectal prolapse recurrence were compared between patients offered de novo repairs vs redo operations, which were further stratified by whether the patient had abdominal or perineal repair (Table 2). Forty-nine patients (15.6%) recurred in the de novo group vs 10 patients (11.7%) in the redo repair group. This difference was not statistically significant ($p = 0.117$).

DISCUSSION

Rectal prolapse repair is associated with a high rate of recurrence. On the lower end of the scale, a recent

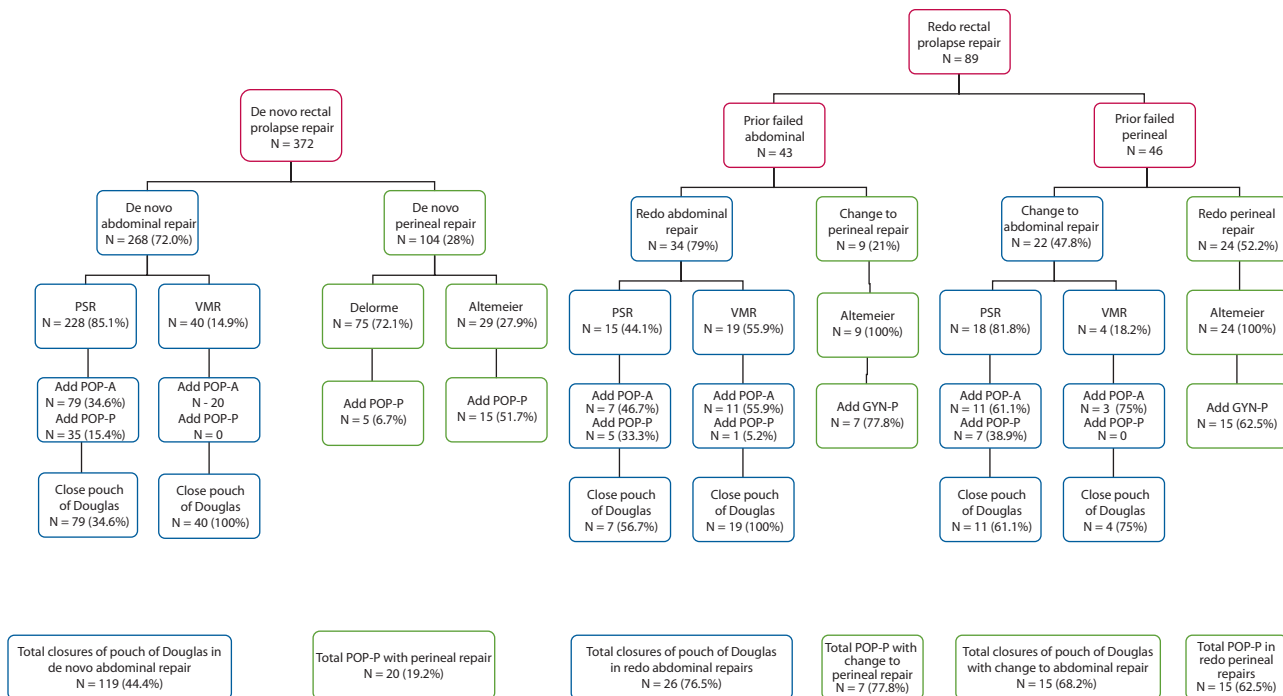


FIGURE 1. Comparison of types of operations offered in de novo vs redo patients. GYN-P = vaginal pelvic organ prolapse resuspensions; POP-A = concomitant abdominopelvic organ prolapse repairs such as sacral colpopexy, hysteropexy, culdoplasty; POP-P = concomitant perineal pelvic organ prolapse repairs such as colpocleisis, posterior repair, levatorplasty; PSR = posterior suture rectopexy; VMR = ventral mesh rectopexy.

large-scale epidemiological study of 25,238 adults, in which the natural history of rectal prolapse repair was observed over time, suggested that at least 12.7% of patients ultimately required reoperation for recurrent rectal prolapse, of which many will recur yet again.⁹ On the high end, the PROSPER randomized controlled trial (RCT), which followed rectal prolapse patients closely over time for all recurrences (observed and re-repaired), convincingly documented observed recurrence rates to be as high as 25%.¹⁰

Research on how to improve the current management of de novo and recurrent rectal prolapse has been difficult to perform owing to patient heterogeneity, length of follow-up needed, and the necessity of accounting for strong surgeon preference toward a particular approach, as well as the variable level of surgical expertise. Another hurdle is the strong belief by practicing surgeons that randomization to another approach does not offer patient equipoise. For example, the PROSPER RCT investigators had to close the trial early owing to slow accrual and difficulty getting surgeons to agree to randomize their patients to abdominal vs perineal repair.¹⁰ Another RCT from Sweden observed similar strong surgeon preferences. In that study, 80 patients were ultimately considered “appropriate” for randomization within the perineal group, 54 patients were “appropriate” for randomization within the abdominal group, and only 18 patients were “appropriate” for randomization in a comparison between the abdominal vs perineal groups.¹¹

Both of these RCTs were underpowered; however, several larger, pooled meta-analyses also failed to show statistical superiority between surgical approaches, with authors questioning the reliability of individual patient follow-up over the long term.¹² This lack of reliable information forces surgeons to make clinical decisions on the basis of their preferences, biases, and comfort with particular techniques rather than on the basis of the data.

Although the debate over which approach is best continues, the literature seems to support the consensus view that using the abdominal approach for the index operation may be the more durable long-term option, with less need for redo surgeries. A review of 1625 patients from a European national registry revealed a reoperation rate of 26% after perineal rectal prolapse repair as opposed to only 10% for abdominal rectopexy repair.¹³ An even larger national registry of 25,238 patients from England revealed a reoperation rate of 16.9% after elective perineal resection, which is significantly higher than the 10.4% recurrence rate observed after elective laparoscopic fixation.⁹ These findings and other similar data prompted the ASCRS to issue a weak recommendation (grade 2B) for patients with acceptable risk to undergo transabdominal rectal fixation for their prolapse repair.¹

Making recommendations regarding which type of redo surgery to perform after a failed prior attempt is more difficult. At first glance, our outcomes appeared similar irrespective of approach. However, our data point to some

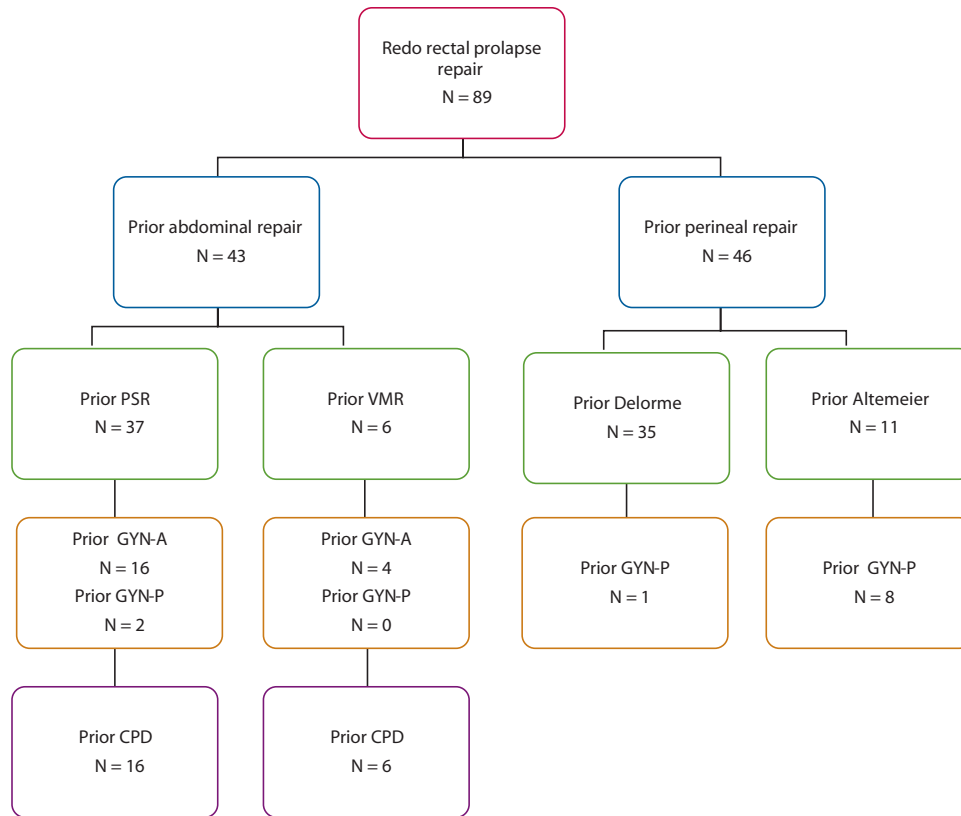


FIGURE 2. Prior rectal prolapse repair history in patients needing redo rectal prolapse repair. CPD = closure of pouch of Douglas; GYN-A = abdominal pelvic organ prolapse resuspensions; GYN-P = vaginal pelvic organ prolapse resuspensions; PSR = posterior suture rectopexy; VMR = ventral mesh rectopexy.

TABLE 2. Recurrence rates in patients who failed a prior operation, by surgical approach

Variable	Rectal Prolapse Repair History (N = 89)					
	Prior Abdominal Repair (N = 43)		Prior Perineal Repair (N = 42)			
	Repeat Abdominal Repair 34		Change to Perineal Repair 9	Repeat Perineal Repair 20		Change to Abdominal Repair 22
New rectal prolapse repair approach (N)				No	Yes	
Concomitant pelvic organ prolapse repair procedure performed (N)	No	Yes		No	Yes	
	8	26		5	20	
Recurrence (N, %)	1 (12.1%)	1 (3.8%)	1 (11.1%)	2 (40%)	3 (20.0%)	2 (9.1%)
	2 (5.9%)		1 (11.1%)	5 (20%)		2 (9.1%)
Total	3 (6.9%)			7 (31.8%)		

important general caveats. For example, our descriptive study seemed to show modest improvement of early surgical recurrences when surgeons escalated their surgical approach, modifying an abdominal procedure by adding ventral mesh if the patient had a failed suture rectopexy or by offering a multidisciplinary repair.

Recognizing the folly of drawing strong conclusions on the basis of descriptive data, we turned to expert crowdsourcing. First, these findings were presented at the annual meeting of the ASCRS.¹⁴ After this, 57 colorectal surgeons

with a significant clinical interest in pelvic floor disorders convened to offer their opinions on how these data, combined with their prior expertise, could inform future decision-making when faced with the need to offer a redo rectal prolapse repair. Their opinions are summarized in Figure 3. As a result of this consensus-building activity, our experts delivered strong consensus (defined as >70% agreement) concerning the after recommendations: Whenever a patient is fit for abdominal surgery, a redo abdominal procedure should be considered. The redo surgery should be

Degree of consensus:

- High
- Moderate
- Low

		Prior failed rectal prolapse procedure			
		Prior abdominal procedure		Prior perineal procedure	
		Prior posterior suture rectopexy	Prior ventral mesh rectopexy	Prior Delorme	Prior Altemeier
Redo repair consensus recommendations	Posterior suture rectopexy	70%	38%	70%	88%
	Posterior resection rectopexy	30%	44%	10%	
	Posterior mesh rectopexy	11%	33%	11%	11%
	Ventral mesh rectopexy	100%	89%	90%	100%
	Delorme	10%	13%	10%	13%
	Altemeier	10%	0%	20%	50%
Added maneuvers and tips for consensus approach	Sacrocolpexy for enterocele with > Stage II POP	80%	78%	60%	88%
	Culdoplasty for radiological enterocele and no visible POP	50%	N/A	30%	38%
	Levatorplasty if Altemeier chosen	100%	100%	100%	100%
	Colpocleisis or posterior vaginal repair if perineal rectal prolapse repair offered, visible POP	100%	100%	100%	100%

FIGURE 3. Degree of expert consensus on recommended surgical approach to patients with recurrent rectal prolapse. These votes were taken with the following after caveats: 1) patients were assumed to be healthy to undergo either an abdominal or a perineal operation; 2) patients had no contraindications to an abdominal operation; 3) patients did not have personal preferences pertaining to a particular surgical approach; 4) gynecologic surgeons were easily available for consultation. POP = pelvic organ prolapse; N/A = not applicable.

modified so as not to simply repeat the prior failed index repair (100% consensus). When asked to consider safe redo options, the experts exhibited a decreased interest in offering either resection rectopexy or posterior mesh rectopexy. Conversely, VMR for patients who have failed other repairs was consistently deemed suitable for most redo scenarios. The experts also reached consensus on the recommendation that concomitant repair of uterine and vaginal prolapse should be offered when stage II or higher POP is clinically noted. Opinions on what to do with radiological enteroceles that may not be appreciated on a physical examination were divided. These discussions are further summarized in the proposed algorithm for the management of rectal prolapse recurrences (Fig. 4).

The opinions of our experts are supported by previously published reports on this topic, which also favor abdominal fixation over perineal repair in redo settings. For example, in 2006, during the pre-VMR era, Steele et al conducted a retrospective review of 78 patients with rectal prolapse recurrences, revealing a 39% failure rate among patients undergoing the PA for their redo operation, as opposed to the 13% failure rate experienced by patients undergoing a redo abdominal approach.¹⁵ In our study of 89 recurring patients, we found clear surgeon preference toward offering a redo abdominal procedure, even in patients who failed a prior perineal repair. Moreover, the short-term results were equivalent to those offered de

novo surgery, although data with longer follow-up suggest that patients undergoing redo surgery usually have a higher rate of recurrence.¹⁶

Limitations of this study include the short follow-up period. This pilot was conceived as a feasibility study to see whether surgeons would collaborate and contribute data to a communal pool in a sustained way. In this sense, our pilot was a success: we were able to maintain this effort over a 5-year timespan and collected short-term data on nearly 500 patients. However, given the limitations of our data, we can only detect “technical recurrences” and not the more patient-driven, delayed recurrences that can occur decades after an index repair.⁸ Nevertheless, despite the short follow-up, we are still able to make meaningful observations and recommendations regarding possible ways to decrease the likelihood of short-term, technical recurrences. This observation alone represents a valuable addition to the literature.

Despite these limitations, an additional strength of this article is the collaborative engagement of a large group of experts not only regarding data collection but also concerning the review and interpretation of data. The crowd-sourced QI data review method used in this study, together with the subsequent collaborative and consensus-driven expert recommendations on how to approach specific recurrent prolapse patients, offers readers a broader perspective on this understudied topic, which is not available

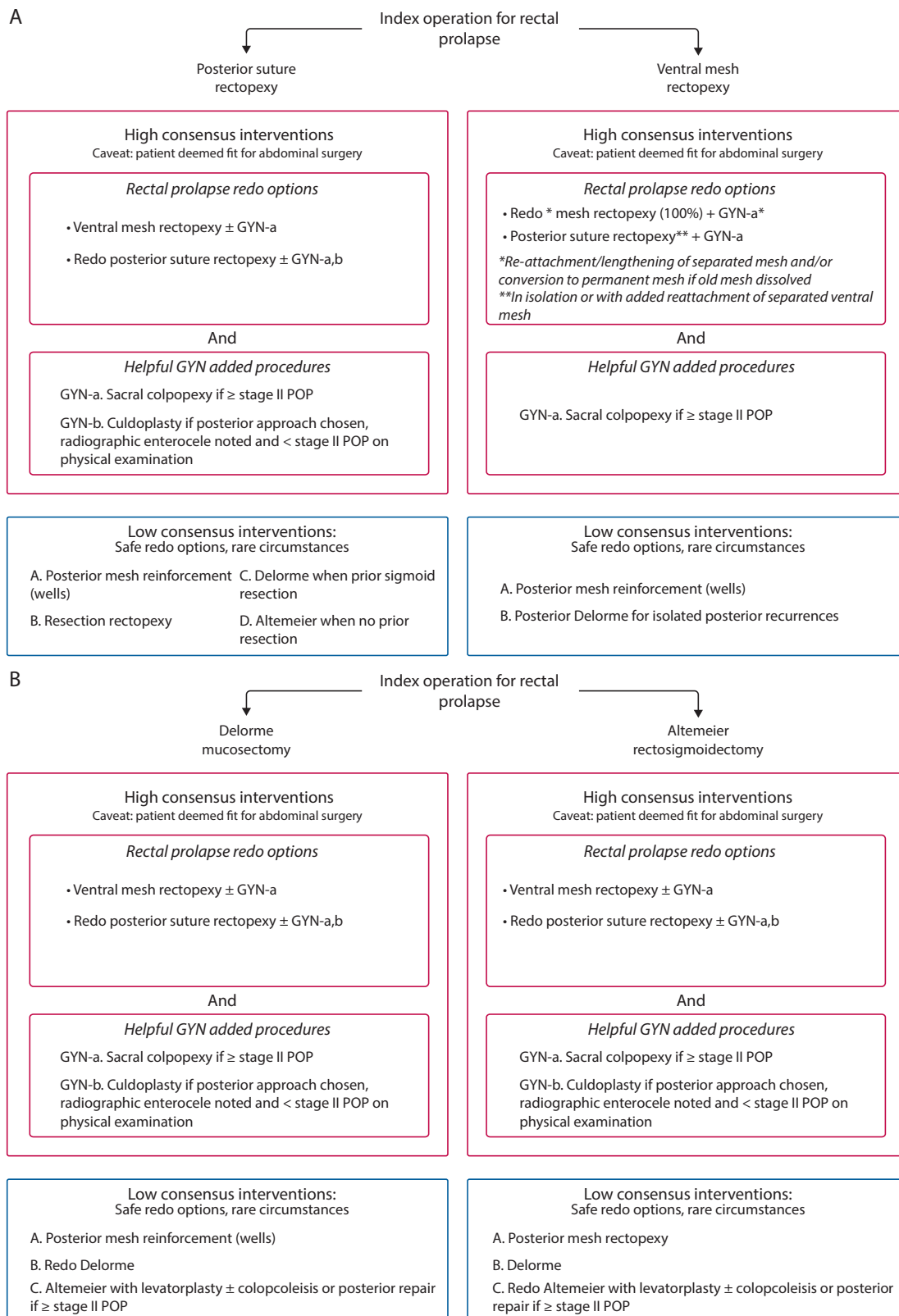


FIGURE 4. Proposed consensus algorithms on how to approach recurrent rectal prolapse patients when patients are fit to undergo most procedures. A, Patient had a prior failed abdominal operation. B, Patient had a prior failed perineal operation. GYN = abdominopelvic organ prolapse resuspension; POP = pelvic organ prolapse.

in single-author or single-institution investigations. Better studies on this topic are hard to perform because they would require longitudinal, prospective data collection and patient follow-up of prohibitively large numbers of prolapse patients who will need to be followed in such a way that they can be observed, even if they choose not to return to their first surgeon for their follow-up operation, as is frequently the case. Such patient-centered follow-up will only be possible if more surgeons get excited regarding the opportunities offered in QI research and join this and other similar collaboratives as we work together to expand our QI effort to this next, more patient-centric, level.

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