**The legacy of Alberto Peña and his followers**

**are lies, chaos, and the problems of the patients**

**Abstract**

This review analyzes the articles of recent, staunch supporters of Alberto Peña, who in numerous articles promoted his proposed posterior sagittal approach for pull-through surgery (PSARP) in patients with anorectal malformations (ARMs). For 40 years, citing the decisions of the Krickenbeck classification, they blocked the publication of articles that contradicted Peña's experience, even though all of Peña's innovations had no scientific basis. For example, he claimed that the anal canal was absent in ARMs because he destroyed it, and that the puborectalis muscle was of little importance because he transected it. He changed anatomical names and supposedly discovered the great importance of the external sphincter, which, meaning according to the recognized anatomical classification, the subcutaneous portion of the external anal sphincter (EAS) and constitutes only the tenth and very weak part of the EAS. The entire thrust of Peña's false claims served as a justification for PSARP. Thus, since 1982, most pediatric surgeons have been destroying the naturally functioning anal canal, rendering them disabled. Poor treatment outcomes are allegedly due to the congenital absence of the anal canal and spinal pathology. However, a large body of information has accumulated that confirms the scientific data known before the advent of the "prophet." Preserving the anal canal significantly improves surgical outcomes. The analyzed articles, published under the direction of Mark Levitt and Ivo de Blaauw, confirm that PSARP leads to good results, but propose less traumatic methods. Although the presence of an internal anal sphincter is recognized, the anal canal is referred to as a rectum or a long fistula. Although in these articles contain many false statements authored by Peña, the fact of paradigm shift is obvious. However, without understanding the normal and pathological physiology of the anorectum, without recognizing the absolute value of scientific evidence obtained by scientists of different generations, the development of the theory of ARMs and ensuring normal anorectal function in patients with ARMs are impossible.

Keywords: legacy of Alberto Peña; anorectal malformations; posterior sagittal anorectoplasty; anal canal; internal anal sphincter; paradigm shift.

**Introduction** In a previous study of Peña's contributions to the diagnosis and treatment of anorectal malformations (ARMs) [1], it was shown that: (1) Peña described, together with DeVries, the posterior sagittal approach (PSARP) for the pull-through procedure in 1982, without having published a single article before; (2) In order to justify the transection of the puborectalis muscle (PRM), which plays an important role in fecal continence, he claimed that since he had not seen this muscle during the operation, it cannot play such an important role as described by pediatric surgeons and physiologists; (3) In order to justify the transection of a large part of the external anal sphincter (EAS), he ignored the centuries-old described anatomy of the anorectum. As a result, he allegedly discovered for the first time the importance of the subcutaneous portion of the external sphincter, which is in fact one-tenth of the EAS and plays no role in fecal continence; (4) To justify the destruction of the anal canal, Peña began to call it a fistula or a rectal pouch or a rectum. Peña's claim of excellent results was false because: (1) he never compared the results of PSARP with the results of other surgeries; (2) he never showed the long-term results of his surgeries; (3) he baselessly claimed that PSARP was the ideal operation for all types of ARMs, and that poor results were due to: (a) the absence of the anal canal, (b) maldevelopment of the spine; (c) poor surgeon skills. However, the long-term results of treating low-type ARMs (congenital anal stenosis, perineal and vestibular ectopia of the anus) after a cutback procedure preserving the anal canal were good in 90% of patients. After PSARP, using the same assessment, poor results were in 100% of patients [1].

Since Alberto Peña invited pediatric surgeons who had completed the Peña Course in Cincinnati to an international conference in 2005, the Krickenbeck classification was adopted and became the mandatory protocol for pediatric surgeons. Peña has not published a single scientific paper. However, articles that contradict Peña's false claims are not published in pediatric scientific journals. His "experience" based on false claims was used to educate pediatric surgeons for 20 years. Little by little, lies have become commonplace, and now all articles and everything in them are permeated with lies.

The article by Halleran et al. describes a new operation that does not name the author of the idea. Ten patients were operated on with the new method in six different hospitals, including four different states in the United States, as well as in Ireland and Canada. How they were distributed is not known.

The introduction states that “The key problem with the cutback anoplasty for rectovestibular fistulae is inadequacy of the perineal body in females, and there is evidence that the PSARP results in superior outcomes in this population {5}.” However, this statement is contrary to the truth. First, cutback anoplasty was used for low types of ARM, since it was known that with visible fistulas (vestibular and perineal ectopy) there is a normally functioning anal canal and in order for the patient to have no problems with fecal and defecation continence it was only necessary to cut the narrow ectopic anus so that there was no obstruction to emptying. The operation which Browne recommended is a simple backward incision from the displaced opening right across the normal situation of the anus, made by placing one blade of a pair of dissecting scissors in the bowel while the other lies on the skin. Browne warns that "No attempt should be made to suture the raw surfaces thus produced, and after a month or two they will be covered with supple and satisfactory new skin" [3]. I compared the long-term results of treatment of perineal fistula with the cutback procedure with PSARP, using the same assessment method that was used before 1982 **(Table 1).** [1].

**Table 1. Remote treatment results after cutback (1-4) and after PSARP (A-D).**

|  |  |  |  |
| --- | --- | --- | --- |
| Authors | Good (%) | Fair (%) | Poor (%) |
| 1. Nixon [4] | 98 | 0 | 2 |
| 2. Ackroyd et al. [5] | 85 | 15 | 0 |
| 3. Kyrklund et al. [6] | 90 | 8 | 2 |
| 4. de la Fuente [7] | 90 | ? | ? |
| А) Schmiedeke et al [8] |  |  | ≈ 60 |
| B) Lombardi et al. [9] |  |  | ≈ 61.4 |
| C) Stenström et al. [10] |  |  | ≈100 |
| D) Abo-Halawa et al. [11] |  |  | ? |

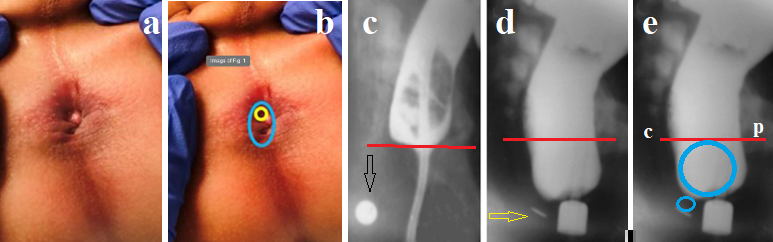
Therefore, the authors' statement that "long-term follow up of patients with perineal and vestibular fistula undergoing cutback anoplasty found a high incidence of soiling along with a poor cosmetic outcome" [2], is a deliberate lie. After cutback procedure, there is never fecal incontinence, and constipation may occur if the operation was performed after megarectum developed, but constipation, but constipation goes away over time. In girls with vestibular ectopia, the function of holding feces and defecation after cutback is normal [3,4,5,6].

After pull-through operation, and especially through posterior sagittal approach, very poor results are explained by the destruction of the normally formed anal canal. In a systematic review by Rigeros Springford et al., long-term active problems were as follows: fecal incontinence, 16.7% to 76.7%; chronic constipation – from 22.2% to 86.7%; urinary incontinence - from 1.7% to 30.5%; ejaculatory dysfunction – from 15.6% to 41.2%; and erectile dysfunction - from 5.6% to 11.8%. [12]. The proximity of the neoanus to the vulva can be changed by cosmetic correction at an older age if desired by the patient [13]. As shown by Chong et al., PSARP leads not only to fecal incontinence and severe chronic constipation, but also to serious damage to the urinary system. From 50 patients in median age at last follow up was 18 years (range 12–34 years) after ARMs correction (4 with cloaca), chronic kidney disease stage II or above was found in 14 (28%) patients, of whom four required a renal transplant. Abnormal bladder outcomes were found in 39 (78%) patients. Augmentation cystoplasty with Mitrofanoff had been performed in 12. Of those who had not undergone cystoplasty, 17 had urinary symptoms, including urinary incontinence in 12. Of the 39 patients with abnormal bladder outcome, 19 (49%) did not have a spinal cord abnormality. There was also no significant statistical association between level of ARM and abnormal renal outcome or presence of bladder abnormality [14]. The reference “5” to the article by Stephens and Smith (1971) cannot confirm the superiority of PSARP because this method was described in 1982. **Inference** The authors did not perform the cutback procedure. To evaluate (revise) this method, they refer to the article by Potts et al. (1954), who did not have time to learn about the study of Stephens (1953). Stephens proved the presence of the anal canal below the pubococcygeal line in low types of ARMs [15]. From 1953 to 1982 there was a whole era when pediatric surgeons successfully performed the cutback procedure, but the authors of the peer-reviewed article completely ignored them, including the Browne article, to which they refer. It follows that the authors' goal was to unfairly discredit the cutback procedure to present PSARP as the method of choice, even though PSARP destroys the anal canal, which is preserved in the cutback procedure. Thus, the authors used an unscientific approach to promote surgical treatment to the detriment of patient health.

**About the diagnosis**

The authors call the pathology in 10 patients "ARM with rectoperineal fistula". Following the unsubstantiated "practice" of Peña, it means that the rectum is connected to a narrow rigid opening in the perineum by a long fistula canal (Figure 1c), which does not ensure the normal function of fecal retention and defecation and therefore must be removed. Following Peña, they stubbornly ignore scientific data about the presence of the anal canal in low types of ARMs. The basis for the removal of the internal anal sphincter called "fistula" is based on research, such as the article by Holschneider et al, The authors stated that " the recommendation to use the distal rectal pouch and parts of the fistula in the reconstruction of anorectal malformations should be reconsidered", because they found in distal specimens aganglionosis in 31% of the rectal pouch specimens, hypoganglionosis in 38%, neuronal intestinal dysplasia (NID) type B in 14%, and dysganglionosis in 10% [23]. However, this study cannot be considered reliable because the findings should have been compared not with rectum, but with the distal part of the intestine of healthy children, i.e., with the anal canal. Meanwhile, it was already known that in healthy children the anal canal has the like distribution of nerve cells [19]. In several articles, the authors come to the same recommendation, since in all normal anal histological features could not be found together in the fistula tissue [24, 25, 26]. Other authors found an anatomical displacement of the "fistula" compared to its normal location [27]. This is associated with anterior ectopia of the anus, but during defecation the anal canal is located and functions normally. This is not visible during anatomical examinations but is recorded on radiography [17, 28]. All these authors had no basis for asserting the impossibility of using a "fistula", since they did not consider either physiological studies (manometry, radiography) or the functional results of operations that preserve the anal canal.

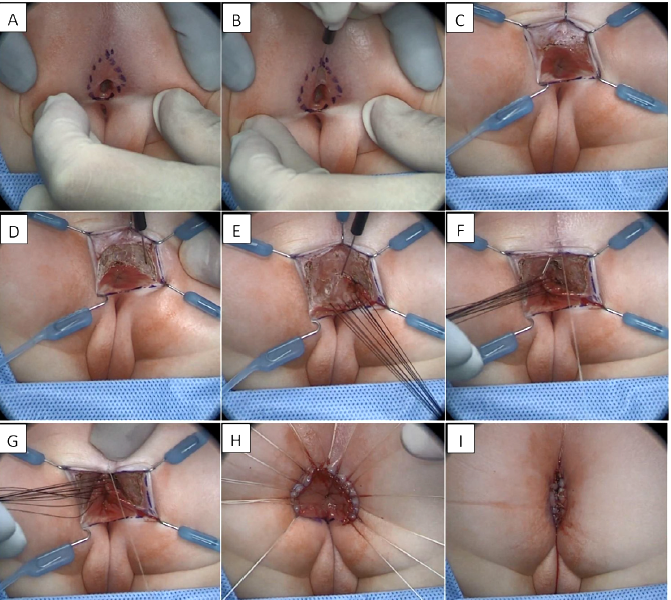
The author who wrote this article draws the attention of readers to the fact that "the fistula opening (yellow circle) is small and located within the anterior extent of the elliptical sphincter complex" (Figure 1a-b from the article by Halleran et al [2]). As a result of centuries of research into the anatomy, all the muscles of the anorectum are divided into the muscles of the pelvic floor (levator plates and PRM), which are located above the pubococcygeal line, and the muscles of the anal canal, which are located below the (p-c) line. These include the internal anal sphincter and three portions of the external anal sphincter (deep, superficial, and subcutaneous). In radiograph 1e, the large blue circle schematically shows the sizes of the deep and superficial parts of the EAS in a patient with perineal ectopy during an attempt at defecation. The subcutaneous part of the EAS is located between the button glued to the anal dimple and the wall of the open anal canal (small blue circle). The circular muscle of the subcutaneous portion of the EAS contracts briefly during a sudden increase in abdominal pressure. It occupies about 1/10 of the total length of the EAS and its thickness in newborns is 2 mm, and in children under one year - 4 mm [17]. Its intersection during the cutback procedure never leads to fecal incontinence. Peña, in PSARP, transected all the muscles involved in fecal continence (the PRM, the deep and superficial portions of the EAS, which he called the muscle complex). He does not cut only the superficial portion of the LES, which he called the external sphincter because it was on the outside. He alone, of thousands of pediatric surgeons who have operated on children with ARMs over many centuries, made the discovery that the external sphincter (the subcutaneous portion of the EAS) is an important muscle in fecal continence. In the article by Halleran et al., the author, taking advantage of the chaos of lies created by Peña, began to call the subcutaneous part of the EAS a muscle complex. The obvious circular muscle (a) he called the elliptical sphincter complex (b) (Figure 1). **(5-false).**



**Figure 1.** **(a-b).** Photographs from the article by Halleran et al. [2]. (c). ARM with perineal ectopy of the anus. The pellet (arrow) is glued to the anal pit. Barium suspension is injected through a catheter inserted into the rectum. The anal canal, located caudal to the p-c line (red line), closed around the catheter, preventing leakage of barium. (d). In the same patient, an attempt to defecate occurred during the introduction of barium on re-admission. The button glued to the anal pit (yellow arrow) is 4 mm from the wall of the open anal canal. Between them, in the subcutaneous tissue, is the subcutaneous part of the EAS. (e). The diagram (d) shows the difference between the lengths of the deep and superficial parts of the EAS versus the subcutaneous part length.

**Inference** This article includes only those patients whose exit orifice was located surrounded by the subcutaneous portion of the EAS. The authors describe a new type of ARM. However, both the photographs and the case description correspond to a known type - **congenital anal stenosis**, which is characterized by fibrous changes near the opening and the presence of a normally formed anal canal [3,4,5,8]

**Operative steps are shown in Figure 2.**



**Figure 2.**  The underlined text in italics represents my comments on the author's text.

* A midline incision is made with cutting monopolar cautery beginning at the posterior aspect of the fistula and continuing to the pre-marked sphincter complex (Figure 2 B).

(*This part of the operation corresponds to the cutback procedure. Considering that the subcutaneous part of the EAS is a circular muscle, it is highly likely that its ring was cut).*

* The posterior extent of the incision will form the posterior aspect of the anticipated anoplasty. Dissection is deepened in the midline using monopolar cautery until the posterior rectal wall is encountered (Figure 2C).

*(Authors believe that “there is virtually no distal rectum that is discarded, thus the inherent value of the distal rectum (the internal sphincter present within the anorectal wall) is preserved" [2]. If they recognize that in the final section of the intestine there is a IAS, then we are talking about the anal canal, and not about the long fistula or rectum.*

* Dissection continues, staying right on the rectal wall, starting at the lateral mucocutaneous junction and proceeding posteriorly, sparing the anterior half of the squamocolumnar junction (Figure 2D).

(*The presence of the squamo-columnar junction confirms that this is a part of the IAS separated from the surrounding tissues, resulting in its denervation and devascularization).*

* Dissection proceeds without incising the sphincter complex until the posterior rectum has been adequately mobilized to be advanced to skin level (Figures 2 D-G).

*(In Figure 1A. the rounded subcutaneous part of the EAS surrounding the hole allowing Hegar dilator 12 pass through is visible. In Figures 2 D-G the greater width of the surgical wound between the apices of the buttocks, which is supposedly inside the ring of the subcutaneous part of the EAS, suggests that the muscular ring has either been transected or torn.).*

* The anoplasty is completed with 4–0 vicryl full-thickness sutures providing apposition of the rectal mucosa to the skin. (Figures H, I).

*(Normally, the IAS ends above the subcutaneous part of the EAS. Why was it necessary to cut it from the place where it is normally located to sew it to the skin? Why was the IAS sewn to the skin at all, if in such cases scarring always occurs, and as Browne showed, without suturing, elastic skin appears there after 1-2 months [3]. In ARMs without visible fistulas under the influence of high rectal pressure during of the anal canal opening I performed perforation of the perineum. After that with a guidewire I inserted a tracheostomy tube into the rectum. The operation ended whithout suture the diastasis between the skin and the mucous of the anal canal. After 10 days, the diastasis closed without scar formation [29].)*

**Inference** The new version of anoplasty proposed by the authors has no scientific basis. It is based on 6 false assumptions. (1). The described case is not a perineal fistula, but congenital anal stenosis; (2). In congenital anal stenosis, as in perineal fistula, there is a normally functioning anal canal, which the authors call a long fistula. Meanwhile, a pathological narrow rigid fistula is only located in the site of penetration of the IAS through the subcutaneous tissue and skin. The length of the fistula is 2 mm in newborns and 4 mm in children of the first year of life. From the point of view of pathological anatomy and physiology, ARM with perineal fistula should be called perineal ectopy of the anus; (3). Around the fistula there is a subcutaneous portion of the EAS, which is a very weak thin muscle (about 1/10 of the total length of the EAS). Its dissection during the cutback procedure does not lead to any consequences. The description of the subcutaneous part of the EAS under the name "sphincter complex" invented by the authors, which supposedly has an ellipse configuration, contradicts scientific research. The subcutaneous part of the EAS is a ring-shaped muscle. (4). In ARM with visible fistulas, the IAS is located above the subcutaneous part of the EAS, as is normal. There is no point in peeling back the mucosa to find the IAS and then isolating it high from the surrounding tissues to sew it under tension to the skin where it never attaches **(Figure 3).**

Изображение выглядит как рентгеновская пленка, Медицинская визуализация, радиология, Медицинская рентгенография

Содержимое, созданное искусственным интеллектом, может быть неверным.

**Figure 3. (а-с).** Lateral radiographs of the anorectum of patients with vestibular ectopia of the anus with contrasting of the rectum and lowering of the Foley catheter balloon into the anal canal until it stops above the narrow ectopic anus. Contrast markers are glued to the anal pit. Red lines are drawn along the border between the rectum and the anal canal (pubococcygeal line). The length of the anal canal is equal to the distance from the p-c line to the contrast marker. In three cases, the distance between the wall of the anal canal and the contrast marker, where the subcutaneous part of the EAS is located, is 2 to 3 mm, with the length of the anal canal being about 2 cm. **(d).** The diagram of the anal canal from the article by Jorge JMN, Habr-Gama A. (Anatomy and Embryology of the Colon, Rectum, and Anus. In: Wolff B.G. et al. (eds) The ASCRS Textbook of Colon and Rectal Surgery. Springer, New York, NY 2007; 1-22.) shows that the distal part of the IAS is located above the small subcutaneous part of the EAS and away from the skin of the anal verge.

The goal of treatment is to dissect the stenosis to normalize rectal emptying. After that there was no point in detaching IAS from the surrounding tissues to suture it to the skin, i.e., below the subcutaneous portion of the EAS. Such dissection leads to damage to the IAS (devascularization and denervation) and disruption of its function. Extensive dissection and sutures lead to disruption of tissue nutrition, an inflammatory process and the formation of fibrous tissue, which causes repeated stenosis of the anus. Thus, the proposed operation consisted of two stages. First, a dissection of the stenotic ring (cutback) was performed. She solved all the problems. The second stage not only made no sense but inevitably leads to disruption of the IAS function and subsequent secondary anal stenosis, the development of megacolon, chronic constipation and descending perineal syndrome, which is characterized by fecal incontinence. All these complications will appear over time as a result of the discrepancy between the large width of the fecal masses formed in the dilated rectum and the narrow anal canal and neoanus, which are not able to pass wide fecal masses.

**Results**  In children with a narrow opening that allows less than Hegar 12, it is essential to know the age of the surgery. In such cases, megarectum develops very quickly, which leads to severe chronic constipation. Therefore, information that the age of the patients was "under 8 months of age" is not enough to assess the damage to the rectum. Surprisingly, all 10 patients with a very rare type of ARM, operated on in 6 different hospitals, had their surgical results registered after 6 months. In "all patients were passing stool spontaneously. No patients required dilation of the anoplasty in the postoperative period" [2]. Firstly, the analysis of the article raises doubts that these patients actually existed. I contacted the authors of the article with a request to clarify the data on the operated children, but no one answered me. Secondly, it is known that early postoperative results are always the same. Thirdly, as can be seen from the article by Levitt et al, based on a review of 398 with good prognosis (read low types of ARMs) for bowel control, the greatest risk for severe constipation and its consequences (fecal impaction, overflow pseudoincontinence, and megacolon) was discovered [30]. This is confirmed in many other studies [1]. Fourthly, as shown above, after the cutback procedure there is no fecal incontinence at all, and mild constipation goes away over time [6].

The same operation described in this review was re-described 4 years later by Xu et al [31]. The aim of this article was to describe "long-term postoperative outcomes" for the period 2020-2023. However, this goal was impossible due to the short period after surgery and therefore the authors again, as in the first article, described "length of stay, time to first feeding, and early stooling patterns" [31]. A retrospective, single-institution study was performed examining 18 male patients with a rectoperineal fistula. This statement contradicts scientific facts and other statements of the authors. (1). As proven above, the described type of ARM is a classic description of congenital anal stenosis; (2). It is detected in only 2% of patients with ARMs [32], which contradicts the possibility of observing it in such a number in a single institution over a period of 4 years. (3). Only two authors of this article (Wood and Levitt) were co-authors of the 1st article published in 2020 [2]. The fact that 7 of the 9 co-authors who did not respond to me about their participation in first strange article did not provide treatment results in the 2nd article confirm my doubt that they did operate on these patients. (4) Although it is written that this study in a single institution was carried out, it is not clear what the role of the authors working in 2 other institutions is.

A lie that is repeated often begins to be accepted as truth. This principle has been in use by Peña and Levitt since 1982 and continues to this day. In a program article they stated, "Except for patients with rectal atresia, most patients with anorectal malformations are born without an anal canal; therefore, sensation does not exist or is rudimentary" [33]. This statement was unsubstantiated without citing any research. It was false, since it was proven that «Anal sensibility was better in those with a functional IAS. This means that the IAS, present in the distal end of the fistula, should be spared as much as possible to preserve anal sensibility aiming to maintain the best possible fecal continence" [34].

The authors claimed without evidence that Important associated anomalies include genitourinary defects, which occur in approximately 50% of all patients with anorectal malformations, and poor surgical results are due to pathology of the sacral spine [33]. The first statement assumes that urological anomalies (vesicoureteral reflux, bladder dysfunction, chronic kidney disease) are a congenital anomaly. However, the paper by Chong et al., was shown that "In one fifth of patients born with anatomically normal upper tracts develop reduced renal function, implying an important acquired component [35]. They did not demonstrate an association between level of ARM or presence of spinal cord anomaly with persistent bladder problems [35]. There was no statistically conclusive evidence that tethered cord by itself affects the urinary or fecal control in these patients [36]. Children with complex ARM have 3.4 times genital and 2.3 times urinary anomalies than less complex forms. [37]. It was noted that there are changes, although statistically insignificant, in the neurovesical function of these patients following PSARP [38].

**Inference** Literature analysis shows that anatomical pathology of the anorectum in ARM is accompanied by anatomical pathology of the genitals and spine. The higher the ectopia of the anus, the more often and more severely the pelvic bones change. But no evidence was obtained that this affects the function of fecal continence or the function of the urinary system. On the other hand, reliable evidence was obtained about the damaging effect of PSARP on the function of fecal continence and defecation, as well as on the urinary system function.

**Paradigm shift**

For several decades, PSARP was considered the ideal operation for all types of ARM. Articles on anterior sagittal anorectoplasty and anoplasty using laparoscopy were allowed to be published because they were based on the same false principles as PSARP: denial of the anal canal justified pull-through operations. In the article by Halleran et al., for the first time in many years, Levitt proposed an operation that has an advantage over PSARP. "The main technical advantage of the PRAA is that it obviates the need for any anterior rectal dissection, thereby mitigating the risk of urethral injury in males or vaginal injury in females" [2]. Although he demonstrates multiple misconceptions, including calling IAS a long fistula, the trend to find more reliable treatment methods is obvious. In the article by Badillo et al., the authors led by Levitt describe four cases of girls with vestibular fistula operated on allegedly with modified PSARP [39]. However, the technique described is known as perineal anal transplant [40, 41] and it has nothing to do with PSARP. It should also be considered an escape from PSARP.

This trend is also noticeable on the European continent. In the article Mašić et al., note that "Despite good outcomes, PSARP risks sphincter transection, perineal body dehiscence, and stenosis." Therefore, they proposed the sphincter-preserving anorectoplasty from the anterior approach [39]. This article describes a procedure called the sphincter-preserving anorectoplasty (SPARP) by the authors. The technique was developed by Peter K. Kottmeier, who is not listed as an author, and Francisca Tolete Velcek. All surgeries were performed by Mašić in 46 patients (7 with rectovestibular fistulas and 39 with rectoperineal fistulas in 14 men and 25 women) treated from January 2017 to December 2024 in Zagreb, Croatia. The remaining authors, including those from the USA, Netherlands and Serbia "were participating in the perioperative management" [42]! The article cites the long-described technique of perineal anal transplant [40,41], but laden with all the false claims that were spread by Peña and Levitt. For example, the focus is on preserving the so-called sphincter complex, meaning the subcutaneous part of the EAS, which is not essential for fecal continence. At the same time, the IAS called the "rectum" is separated from the surrounding tissues to the pelvic floor muscles, because of which its innervation and blood supply are disrupted, which leads to a violation of anorectal reflexes. The statement that at the final stage the PRM and IAS are sutured is surprising. Because from the perineum it is impossible to differentiate the PRM from the deep and superficial parts of the EAS. Observation for 3-89 months, the median is 37 months, does not allow us to judge the functional results. However, since constipation was the main problem observed in 11 patients (55%), this indicates that they had a discrepancy between the width of the rectum and the patency of the newly created anal canal, which threatens the progression of megacolon.

The European Arm-Net Consortium article acknowledges that "According to present knowledge, the “fistula” in ARM represents an ectopic anal canal and should be preserved as far as possible to improve the chance for fecal continence" [43].

**Conclusion**. More than 40 years of massive propaganda of PSARP, which Alberto Peña unfoundedly declared as the ideal operation for all types of ARMs, attracted the attention of pediatric surgeons. Those of them who believed Peña were free to publish articles devoted to their experience using this approach. Thus, pediatric surgeons, who did not realize the value of scientific evidence, became authors of numerous articles and leading specialists. As experts, they suppressed the publication of articles by those pediatric surgeons who found contradictions in Peña's works. The articles I analyzed are an example of the chaos that reigns in this area of pediatric surgery. Understanding the devastating impact of PSARP, like other pull-through operations, is only the beginning of recovery. For patients with ARMs to receive evidence-based treatment, it is necessary to get rid of the misconceptions that Peña, Levitt, de Blaauw, and others have imposed on practitioners. Scientific evidence suggests that children with ARMs can be healthy after pathogenetic treatment.

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