Original article:

PRIMARY ANTERIOR SAGITAL ANORECTOPLASTY (ASARP) A BETTER OPTION FOR THE TREATMENT LOW FEMALE ANORECTAL MALFORMATION

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Abstract

Objective: To decide the specialized relevance and early postoperative result of foremost anterior sagital approach for the treatment of low anorectal malformation in female children.

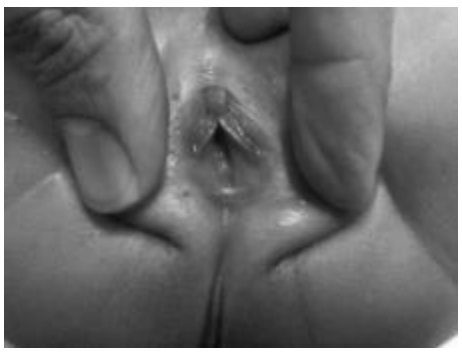
Methodology: Female patients with congenital anorectal distortion who experienced anorectoplasty through anterior sagittal approach were incorporated into the review.

Results and conclusion: Anorectal malformations are one of the common congenital abnormality in children. Ectopic anus and vestibular fistula are low sorts of anorectal malformations (ARM), which are the most widely seen in female kids. Numerous surgical methodologies have been depicted for the treatment of ARM. Anterior Sagital Anorectoplasty (ASARP) has not just advantageous for the anesthetists for the upkeep of anesthesia additionally gives better visualization of anatomical structures amid surgery and give astounding corrective outcome.

Key words: Anorectal malformations. Anterior Sagital Anorectoplasty (ASARP). Female. Children.

Introduction

Basically, the inclined position in PSARP is hard to oversee. It constrains the anesthetist's way to deal with the substance of the patient. Unique care of weight focuses is required. Performing anorectoplasty through anterior approach is an option, hence staying away from all these positional bargains with practically same corrective and utilitarian outcomes are accounted for in many reviews. Remembering the specialized challenges confronted amid PSARP technique and points of interest depicted in few revealed arrangement on for anterior sagittal anorectoplasty, this review was directed to decide the result of anterior sagittal approach for anorectal abnormalities in female children..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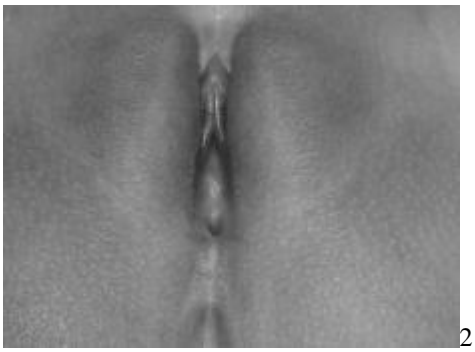
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Fig 1 and 2 : Types of low Anorectal malformations in female

Methodology

This was a prospective collection of data of 43 patients of anorectal Malformation. Age ranged from neonatal period to 3 years of age from July 2014 to December 2016 with a male female ratio of 11:32 . Out of 32 females, 29 were low ARM and 3 with high ARM. These 29 patients were treated with primary anterior sagital aro rectoplasty without colostomy. Out of 29 patients, 10 patients were seen immediately after birth and each patient was advised rectal washouts to avoid stool impaction which might lead severe rectal dilatation

Before the surgery routine preoperative investigation was done with USG abdomen and 2D echo to rule out any other associated anomaly. Patients were admitted one day prior surgery and bowel was prepared with poly ethylene glycol 25 to 40 ml/ kg / hr orally through nasogastric tube till rectal wash out clear. We give pre operative antibiotics prophylaxis.

After the routine organization of anesthesia in a recumbent position, the patient was set in the lithotomy position. When contrasted with an inclined position in PSARP, this was advantageous for the patient as well as for the anaesthesia and surgical group too. It gives a great visualization to the structures amid analyzation and remaking of neoanus and perineal body. The bladder was siphoned in all patients preoperatively. Proposed neoanus was set apart with the assistance of muscle stimulator. A racket formed incision was given, surrounding the fistula and stretching out posteriorly up to the proposed neoanus site. Sphincter muscle complex was distinguished under vision. In the wake of applying stay sutures to fistula, the fistulous tract was dismembered precisely from posterior vaginal wall .

Fig 3: Immediate post operative result

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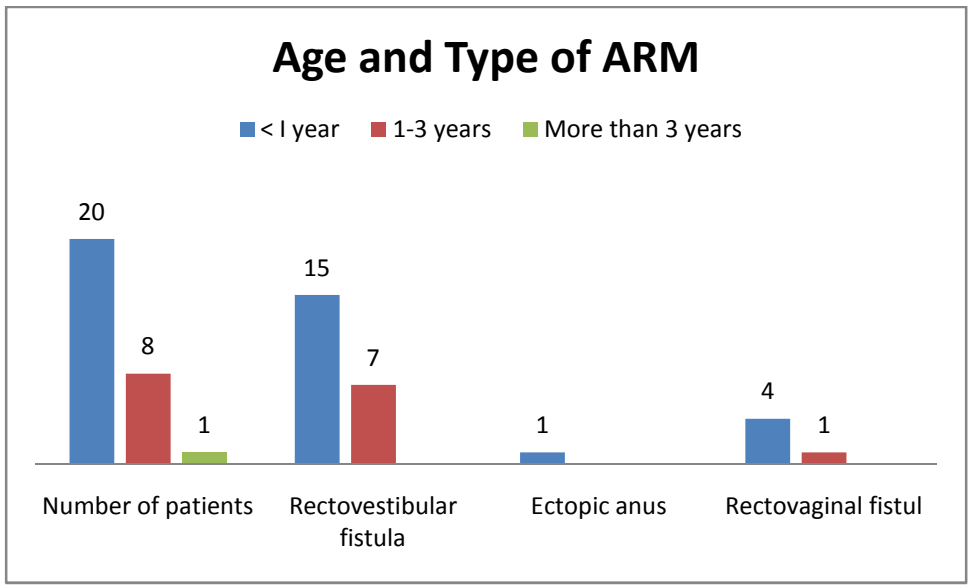
Common wall between anterior rectum and posterior vagina was dissected first anteriorolaterally and then anteriorly. After achieving the adequate length of rectum, it was placed in sphincter muscle complex under vision. Perineal body was reconstructed, taking anchoring stitches of anterior rectal wall, and anoplasty was done. The patient was kept nil by mouth for 4-5 days. On first follow up after a week, anal dilatation was started.

Age and type of ARM

Age	Number of patients	Rectovestibular fistula	Ectopic anus	Rectovaginal fistul
< 1 year	20	15	1	4
1-3 years	8	7		1
More than 3 years	1			



Discussion

Anorectal deformities (ARM) are one of the common malformation in children, In females, ectopic anus and ano/rectovestibular fistula are the commonest variations. The point of treatment is to reestablish the anatomic area of anus inside sphincter muscle complex which at last prompts the rebuilding of a physiologically adequate result, which is continence[1].

Anterior sagital approach of anorectoplasty for anorectal abnormalities in female patients was presented in 1988 and had been being used since then[2] .According to different reviews, this procedure gives great anatomical presentation to agent field and limits the sphincter and other imperative structures damage.[3]

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Numerous surgical systems have been contrived for this reason. Pena and Devaries portrayed the posrerior saggital approach for anorectoplasty [4,5] . Before long this turned out to be extremely prevalent inferable from its great introduction amid surgical system and great anatomical and physiological results. Yet, the altered pocketknife position amid PSARP was hard to oversee for anesthetists and specialists. Aside from trouble in keeping up intravenous get to, it has danger of endotracheal tube dislodgement, eye damage, femoral nerve pressure and spine hyperextension. Limited stomach developments amid taking in this position may prompt traded off ventilation and hindered heart output[6].

ASARP was presented by Okada in 1992 and from that point forward it is picking up fame. A few specialists utilizing it solely, as it defeated the disservices of inclined position in PSARP [7]. with all cases indicating attractive outcomes. In this approach, patient is set in lithotomy position, sphincter muscles are entered under direct vision and puborectal muscle is preserved.8The points of interest detailed with this approach incorporate helpful position of patient, great presentation of agent field, satisfactory assembly of rectum, and close typical remaking of perineal body[9]. Similar comes about as that of PSARP are accounted for with this method. This method should be possible either as essential technique or organized in chose cases with beginning colostomy.

The lithotomy position gives simple access to anesthetist, at the season of acceptance of anesthesia and all through the methodology. It gives great anatomical presentation and limits dismemberment and the harm to sphincter, rectal and vaginal dividers amid surgery. Sphincter is just cut anteriorly with shirking of broad back analyzation.

Accommodation of the position helps in situation of rectum correctly through the correct center of sphincter unpredictable and sufficient recreation of perineal body with greatest utilization of local tissues. Under vision ideal remaking is conceivable without broad stressing of specialist's head and neck. Zamir et. al. and Choudhary et. al. detailed their consequences of ASARP done as single stage procedure[10]. For essential ASARP patients are kept nill per oral for 4-5 days and continued halfway parental nutrition[11]. In our review the greater part of the patients underneath 1 year of age and rectal washouts so we did essential ASARP without colostomy. Reasons of deferred introduction are either postponed familiarity with issue on some portion of guardians or poor abundance to the fitting offices, as revealed by Sinha et. al. [12]. Because of such deferred introduction, as of now happened distal rectal dilatation needs colostomy preceding conclusive method.

Conclusions

Anorectoplasty should effectively be possible through anterior sagittal approach for low anorectal abnormalities in female patients. The approach gives great presentation and resultes in satisfactory corrective outcomes. Anterior Saggital approach for anorectoplasty, in female for low and middle of the road sort of imperforate rear-end is practical to oversee for whole group, gives fantastic presentation amid surgery and results in great restorative result. Be that as it may, long development and a huge arrangement are required for the appraisal of practical result.

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