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**Date:** 15 November 2019

**Sources Searched:** Embase, Medline

## Obstetric Rectovaginal Fistula

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### **1. Do the Surgical Outcomes of Rectovaginal Fistula Repairs Differ for Obstetric and Nonobstetric Fistulas? A Retrospective Cohort Study.**

**Author(s):** Karp, Natalie E; Kobernik, Emily K; Berger, Mitchell B; Low, Chelsea M; Fenner, Dee E

**Source:** Female pelvic medicine & reconstructive surgery; ; vol. 25 (no. 1); p. 36-40

**Publication Type(s):** Comparative Study Journal Article

**PubMedID:** 28922306

Available at [Female pelvic medicine & reconstructive surgery](#) - from Ovid (LWW Total Access Collection 2019 - with Neurology)

**Abstract:**OBJECTIVESRectovaginal fistulas can occur from both obstetric and nonobstetric (eg, inflammatory bowel disease, iatrogenic, or traumatic) etiologies. Current data on factors contributing to rectovaginal repair success or failure are limited, making adequate patient counseling difficult. Our objective was to compare outcomes of transperineal rectovaginal fistula repair performed in a single referral center on women with obstetric and nonobstetric causes.METHODSWe performed a retrospective cohort study of women who had a transperineal rectovaginal fistula repair performed by a urogynecologist at the University of Michigan from 2005 to 2015. Data were obtained by chart review and included demographics, medical comorbidities, fistula etiology, history of a prior fistula repair, failure of current repair, time to failure, and operative details. Repair failure was defined as fistula symptoms with presence of recurrent fistula on exam or imaging in the postoperative follow-up period. Comparisons between the obstetric and nonobstetric cohorts were performed using  $\chi^2$ , Fisher exact, and Wilcoxon rank sum tests. Relative risks were calculated to identify predictors of failure.RESULTSEighty-eight women were included-53 obstetric and 35 nonobstetric fistulas. The overall fistula repair failure rate was 22.7% (n = 20). Median follow-up was 157.0 days (range, 47.5-402.0). Of all the factors, only nonobstetric etiology was significantly associated with an increased risk of repair failure (relative risk, 3.53 [range, 1.50-8.32]; P = 0.004.CONCLUSIONSNonobstetric rectovaginal fistulas have a nearly 4-fold increased risk of repair failure compared with obstetric fistulas. Our results will help surgeons adequately counsel patients on potential outcomes of surgical repair of obstetric versus nonobstetric rectovaginal fistulas.

**Database:** Medline

## **2. Obstetric fistula: The role of physiotherapy: A report from the Physiotherapy Committee of the International Continence Society**

**Author(s):** Brook G.

**Source:** Neurourology and Urodynamics; Jan 2019; vol. 38 (no. 1); p. 407-416

**Publication Date:** Jan 2019

**Publication Type(s):** Article

**PubMedID:** 30311690

Available at [Neurourology and Urodynamics](#) - from Wiley Online Library

**Abstract:**Aims: To discuss the role of physiotherapy in the management of women who have suffered an obstetric fistula, referring to research findings when appropriate and available, and the experiences of clinical specialists in the field. Method(s): The experiences of physiotherapists who have worked in countries where obstetric fistula is prevalent, and the limited literature available, were considered in producing this consensus document on behalf of the ICS Physiotherapy Committee. Result(s): The role of physiotherapy both pre- and post-fistula repair was identified, and is multi-faceted. Women may have general rehabilitation needs based on the obstructed labor itself and subsequent care. All affected women may benefit from pelvic floor muscle assessment, education and exercises to optimize the outcome of their surgery; further pelvic floor physiotherapy may be indicated for those who experience persistent genitourinary dysfunction following closure of the fistula. Conclusion(s): Further robust research is required to confirm the effectiveness of physiotherapy in the management of women who have suffered an obstetric fistula and the optimum development of such services. Based on the available literature and the experience of physiotherapists in the field, there was consensus within the ICS Physiotherapy Committee that patient outcomes can be improved if physiotherapy is provided as part of the multidisciplinary team. Physiotherapy should not be overlooked when fistula services are being developed. Copyright © 2018 Wiley Periodicals, Inc.

**Database:** EMBASE

### **3. Research in Obstetric Fistula: Addressing Gaps and Unmet Needs**

**Author(s):** Pope R.

**Source:** Obstetrics and gynecology; May 2018; vol. 131 (no. 5); p. 863-870

**Publication Date:** May 2018

**Publication Type(s):** Editorial

**PubMedID:** 29630017

Available at [Obstetrics and gynecology](#) - from Ovid (LWW Total Access Collection 2019 - with Neurology)

**Abstract:** Although obstetric fistula has likely plagued women since the beginning of time, very little research proportionally exists. This article summarizes the most substantial research on the topic and delineates research gaps and future needs. Existing research demonstrates that access to care is the underlying cause of obstetric fistula and that the first attempt at closure holds the highest chance at success, ranging between 84% and 94%. For simple cases, 10 days of a catheter is sufficient, although what constitutes as simple is unclear. Circumferential fistulas are at high risk for ongoing urethral continence. Psychosocial programs are helpful for all women, but those who are "dry" tend to reintegrate into society, whereas those still leaking need additional support. Prenatal care and scheduled cesarean delivery are recommended to avoid another fistula. Gaps in research include accurate prevalence and incidence, interventions to improve access to care, surgical technique, especially for complex cases, and ways to prevent ongoing incontinence, among many others. In all areas, more rigorous research is needed.

**Database:** EMBASE

### **4. Evaluation and Management of Rectovaginal Fistulas.**

**Author(s):** Bhama, Anuradha R; Schluskel, Andrew T

**Source:** Diseases of the colon and rectum; Jan 2018; vol. 61 (no. 1); p. 21-24

**Publication Date:** Jan 2018

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 29219917

Available at [Diseases of the colon and rectum](#) - from Ovid (LWW Total Access Collection 2019 - with Neurology)

**Database:** Medline

## **5. Recto-Vaginal Fistula of Obstetric Origin - A Surgical Solution.**

**Author(s):** Statescu, Gabriel; Negura, Cristian; Cretiu, Luciana; -

**Source:** Chirurgia (Bucharest, Romania : 1990); 2016; vol. 111 (no. 6); p. 532-534

**Publication Date:** 2016

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 28044959

Available at [Chirurgia \(Bucharest, Romania : 1990\)](#) - from Unpaywall

**Abstract:**A 26 year-old female patient was admitted for the first time in the surgical, presenting an abnormal connection between the rectum and vagina given a context of an apparently clear period of time following a natural childbirth 1 year and 10 months ago. This is a rare pathological condition with a major physical, mental and sexual impact for a young female. Various surgical treatment solutions are described in the specialized literature. Yet, we have not come across any studies that analyzed the various means of surgical treatment. In what follows we will describe the technique we used in this case, with a very good immediate result and after 5 years by surgery.

**Database:** Medline

## **6. Current Diagnosis and Management of Pelvic Fistulae in Women**

**Author(s):** Rogers R.G.; Jeppson P.C.

**Source:** Obstetrics and Gynecology; Sep 2016; vol. 128 (no. 3); p. 635-650

**Publication Date:** Sep 2016

**Publication Type(s):** Article

**PubMedID:** 27500321

Available at [Obstetrics and Gynecology](#) - from Ovid (LWW Total Access Collection 2019 - with Neurology)

**Abstract:**Pelvic fistulae are an abnormal communication among the genitourinary tract, the gastrointestinal tract, and the vagina or perineum. Genital tract fistulae have been described in the medical literature for the past several thousand years. Advancements in both the diagnosis and treatment of vaginal fistulae have been obtained over the past century as surgical interventions have become safer and surgical techniques have improved. The most common cause of fistulae worldwide is obstructed labor. In developed countries, fistulae most commonly occur after benign gynecologic surgery, but obstructed labor, malignancy, radiation exposure, and inflammatory bowel disease can also cause fistulae. Fistulae significantly affect quality of life. Diagnostic studies and radiologic imaging can help aid the diagnosis, but a thorough physical examination is the most important component in the evaluation and diagnosis of a fistula. Temporizing treatments are available to help ease patient suffering until surgical management can be performed. Surgical repairs can be performed using an abdominal, vaginal, or transanal approach. Although technically challenging, surgical repair is usually successful, but closure of the fistula tract does not guarantee continence of urine or feces, because there is often underlying damage to the bowel and bladder. Copyright © 2016 by The American College of Obstetricians and Gynecologists. Published by Wolters Kluwer Health, Inc. All rights reserved.

**Database:** EMBASE

## **7. Presentation and management of rectovaginal fistulas after delivery.**

**Author(s):** Reisenauer, Christl

**Source:** International urogynecology journal; Jun 2016; vol. 27 (no. 6); p. 859-864

**Publication Date:** Jun 2016

**Publication Type(s):** Journal Article

**PubMedID:** 26476822

Available at [International urogynecology journal](#) - from ProQuest (Health Research Premium) - NHS Version

**Abstract:**INTRODUCTIONObstetric trauma leading to rectovaginal fistula (RVF) formation results from perineal laceration and/or from prolonged ischemia and necrosis following obstructed labor. Due to modern obstetric care fistulas are rare in industrialized countries.METHODSPatients undergoing surgery for a RVF between January 2005 and December 2014 at the Department of Obstetrics and Gynecology, Tuebingen, Germany, were identified and their records were reviewed retrospectively.RESULTSO f 48 patients, 13 developed RVF of obstetric etiology. Parity ranged from 2 to 4. RVF repair was performed in all patients using a transvaginal approach: fistula excision and multilayer closure (7 of 13) with Martius flap interposition (1 of 7) and sphincteroplasty (5 of 13). One RVF closed spontaneously. Due to significant destruction of the anal canal, large RVF and RVF recurrence, 4 of the 13 patients needed a temporary protective ileostomy. Fistula closure was achieved in 12 of 13 patients.CONCLUSIONThe choice of RVF repair should be tailored to the underlying pathology and type of repair done previously and the patient's wishes.

**Database:** Medline

## **8. Incidence of obstetric fistula in Norway: a population-based prospective cohort study.**

**Author(s):** Trovik, Jone; Thornhill, Heidi F; Kiserud, Torvid

**Source:** Acta obstetricia et gynecologica Scandinavica; Apr 2016; vol. 95 (no. 4); p. 405-410

**Publication Date:** Apr 2016

**Publication Type(s):** Journal Article

**PubMedID:** 26713965

Available at [Acta obstetricia et gynecologica Scandinavica](#) - from Wiley Online Library

**Abstract:**INTRODUCTIONObstetric fistula is a serious complication of childbirth prevalent in developing societies. Less is known about its occurrence in industrialized countries. We aimed to determine incidence and outcome of obstetric fistulas in Norway.MATERIAL AND METHODSThis was a population-based prospective cohort study. Patient characteristics were registered for all treated at the National Treatment Center for Gynecologic Fistulas, Haukeland University Hospital, Bergen. Women with obstetric fistula after delivering in Hordaland County were included when calculating the incidence based on number of deliveries in that county during 1995-2014.RESULTSO f 280 fistulas, 40 were related to obstetrics (four urogenital and 36 enterogenous), 19 women were from Hordaland County. During this period, 116 389 deliveries were registered, giving an incidence of obstetric fistula of 16.3/100,000 deliveries (95% confidence interval 10.2-25.7/100,000). The urinary fistulas were due to cesarean section, cerclage, and uterine rupture, and all were repaired surgically. The 36 enterogenous fistulas were all related to vaginal deliveries; nine (25%) were instrumental and 19 (53%) had experienced a perineal tear of grade 3-4. These fistulas were small, with a median diameter of 2 mm. Four healed spontaneously or after enterostomy, and 30 were repaired transvaginally. In all, 37 of 40 obstetric fistulas were confirmed healed at follow up. Two women refrained from surgery, and one was lost to follow up.CONCLUSIONObstetric fistula does occur in industrialized societies but with a low incidence; fistulas are due to obstetric trauma or surgery rather than prolonged obstructed labor. The outcome of treatment is excellent when women are treated at a competent center.

**Database:** Medline

## 9. Minimally invasive treatment of traumatic high rectovaginal fistulas.

**Author(s):** Mukwege, Denis; Mukanire, Ntakwinja; Himpens, Jacques; Cadière, Guy-Bernard

**Source:** Surgical endoscopy; Jan 2016; vol. 30 (no. 1); p. 379-387

**Publication Date:** Jan 2016

**Publication Type(s):** Journal Article

**PubMedID:** 25847136

Available at [Surgical endoscopy](#) - from SpringerLink - Medicine

Available at [Surgical endoscopy](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Surgical endoscopy](#) - from Unpaywall

**Abstract:**BACKGROUNDWe propose a new minimally invasive technique by laparoscopic approach which minimizes parietal damage and allows precise location of the fistula, hence reduces blind dissection.METHODSTen consecutive patients suffering from a HRVF benefited from the described technique. Location and time frame were east of the Democratic Republic of Congo and September 2012 through January 2014. By laparoscopy, dissection of the mesorectum in the "holy plane" is taken posteriorly as distally on the sacrum as possible. Dissection subsequently continues laterally beyond the fistula in an effort to maximally circumvene the fistulous area where no plane of cleavage can be found. If the cleavage plane beyond the fistula addresses a healthy rectum, a suture of vaginal and rectal defect is performed. If the cleavage plane beyond the fistula involves significant laceration of the rectum, while leaving at least 2 cm of healthy rectum above the sphincter, rectal resection and colorectal anastomosis are performed. If the rectal laceration involves the distal 2 cm but halts short of the sphincter (large fistula), the pull-through technique is performed.RESULTSO f ten participants, four had large HRVF and two presented significant fibrosis. Three underwent simple suture of rectal and vaginal defect, one rectal resection and six a "pull-through" technique. The median procedure time was 1h50 (1h00-3h30). There was no morbidity. None of the patients required protective ileostomy or colostomy. Nine patients were declared clinically cured with a median follow-up of 14.3 months (11-36). The Cleveland Clinic Incontinence Score was 20 in all patients before the treatment and was significantly ( $p = 0.004$ ) reduced to 2.6 [0-20] after the treatment.CONCLUSIONSThis minimally invasive technique allowed us to treat HRVF, including complex ones in ten patients without significant morbidity. Clinical success with a median follow-up of 14.3 months was 90%.

**Database:** Medline

## 10. Evaluation of obstetric anal injuries

**Author(s):** Grigoriadis T.; Mylona S.-C.; Giannoulis G.; Athanasiou S.; Antsaklis A.

**Source:** Donald School Journal of Ultrasound in Obstetrics and Gynecology; 2015; vol. 9 (no. 3); p. 266-274

**Publication Date:** 2015

**Publication Type(s):** Review

Available at [Donald School Journal of Ultrasound in Obstetrics and Gynecology](#) - from Unpaywall

**Abstract:** Intrapartum damage to the anal sphincter is an important factor in fecal incontinence. Obstetric anal sphincter injuries (OASIS) vary from 1 to 18% of vaginal deliveries, including instrumental deliveries. The severity of anal sphincter injuries vary from superficial lacerations to deep injuries that can extend to the epithelium. Obstetric anal sphincter injuries are associated with both short-term complications (heavy bleeding, difficulties in recovery, increased incidence of infections, increased perineal pain) and long-term complications (rectovaginal fistulae or fecal incontinence). A significant number of these anal sphincter injuries can be detected promptly after a good clinical examination, but still that does not exclude the possibility of these women suffering long-term complications. What is more when some of these so called 'occult tears' go undetected further increase the morbidity of the woman. Sonography of the perineum and the anal sphincter appears to offer a better diagnosis and detection of these injuries after vaginal delivery, which allows a timely and better treatment with less complications, with endoanal sonography offering the best detection rates so far. Copyright © 2015, Jaypee Brothers Medical Publishers (P) Ltd. All rights reserved.

**Database:** EMBASE

## 11. Recurrent obstetric rectovaginal fistula treated by Surgisis graft: A case report

**Author(s):** Brtil E.; Stnculescu R.; Comandasu D.E.; Brtil C.P.; Carstoiu M.M.; Munteanu O.; Berceanu C.

**Source:** European Journal of Clinical Investigation; May 2015; vol. 45 ; p. 85-86

**Publication Date:** May 2015

**Publication Type(s):** Conference Abstract

Available at [European Journal of Clinical Investigation](#) - from Wiley Online Library

**Abstract:** Background: Obstetrical trauma is the most common cause of rectovaginal fistulas. Although it has an incidence of 0.5-1% of all vaginal births, rectovaginal fistulas produce a devastating effect on women's quality of life. We present the romanian experience in the treatment of recurrent rectovaginal fistulas using a tissue interposition graft of acellular biological second generation Surgisis. Material(s) and Method(s): We present the case of a 33 years patient who gave birth vaginally to a 3200 g child 10 years before, after a precipitate labor for which an episiotomy was performed, followed by the appearance of rectovaginal fistula with numerous attempts of reconstruction. Following a process in which we used biological graft interposition was cured the rectovaginal fistula. Result(s): We present the principles we consider important in the treatment of recurrent rectovaginal fistulas to achieve maximum success rate. In this case with multiple treatment attempts in history that led to major alterations in the anoperineal and vulvovaginal region we used the technique of episiopectotomy with sphincter reconstruction and interposition of acellular tissue graft. Favorable postoperative course proved the method's efficacy. Conclusion(s): Recurrent rectovaginal fistulas associated with sphincter lesions can be addressed by episiopectotomy technique. Biological tissue graft interposition is an alternative that can solve recurrent rectovaginal fistulas.



**Database:** EMBASE

**12. Musculoskeletal sequelae in patients with obstetric fistula - a case-control study.**

**Author(s):** Tennfjord, Merete Kolberg; Muleta, Mulu; Kiserud, Torvid

**Source:** BMC women's health; Nov 2014; vol. 14 ; p. 136

**Publication Date:** Nov 2014

**Publication Type(s):** Journal Article

**PubMedID:** 25380616

Available at [BMC women's health](#) - from BioMed Central

Available at [BMC women's health](#) - from SpringerLink - Medicine

Available at [BMC women's health](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMC women's health](#) - from Unpaywall

**Abstract:**BACKGROUNDObstetric fistula is essentially a result of pelvic injury caused by prolonged obstructed labour. Foot drop and walking difficulties in some of these women signify that the injury may extend beyond the loss of tissue that led to the fistula. However, these aspects of the pelvic injury are scarcely addressed in the literature. Here we specifically aimed at assessing musculoskeletal function in women with obstetric fistula to appreciate the extent of the sequelae of their pelvic injury.METHODSThis case-control study compared 70 patients with obstetric fistula with 100 controls matched for age and years since delivery. The following was recorded: height, weight, past and present walking difficulties, pain, muscle strength and joint range of motion, circumference and reflexes. Differences between groups were analysed using independent sample t-test and chi-square test for independence.RESULTSA history of leg pain was more common among cases compared to controls, 20% versus 7% ( $p = 0.02$ ), and 29% of the cases had difficulties walking following the injuring delivery compared to none of the controls ( $p \leq 0.001$ ). Of these, four women reported spontaneous recovery. Cases had 7° less range of motion in ankle dorsal flexion (95%CI: -8.1, -4.8), 8° less ankle plantar flexion (95%CI: -10.6, -6.5), 12° less knee flexion (95%CI: -14.1, -8.9), and 4° less knee extension (95%CI: 2.9, 5.0) compared to controls. Twelve % of the cases had lower ankle dorsal flexion strength ( $p = 0.009$ ). Foot drop was present in three (4.3%) compared with none among controls. Women with fistula had 4° greater movement in hip extension (95%CI: -5.9, -3.1), 2° greater hip lateral rotation (95%CI: 0.7, 3.3) and 9° greater hip abduction (95%CI: 6.4, 10.7). Twelve % of the cases had stronger medial rotation in the hip ( $p = 0.04$ ), 20% had stronger hip lateral rotation ( $p \leq 0.001$ ), 29% had stronger hip extension ( $p \leq 0.001$ ), and 15% had stronger hip abduction ( $p = 0.04$ ) than controls.CONCLUSIONSWomen with obstetric fistula commonly experienced walking difficulties after the delivery, had often leg pain and reduced function in the ankle and knee joints that may have been compensated by increased motion and strength in the hip.

**Database:** Medline

### **13. Estimating the prevalence of obstetric fistula: a systematic review and meta-analysis.**

**Author(s):** Adler, A J; Ronsmans, C; Calvert, C; Filippi, V

**Source:** BMC pregnancy and childbirth; Dec 2013; vol. 13 ; p. 246

**Publication Date:** Dec 2013

**Publication Type(s):** Research Support, Non-u.s. Gov't Meta-analysis Journal Article Review  
Systematic Review

**PubMedID:** 24373152

Available at [BMC pregnancy and childbirth](#) - from BioMed Central

Available at [BMC pregnancy and childbirth](#) - from SpringerLink - Medicine

Available at [BMC pregnancy and childbirth](#) - from ProQuest (Health Research Premium) - NHS  
Version

Available at [BMC pregnancy and childbirth](#) - from Unpaywall

**Abstract:**BACKGROUNDObstetric fistula is a severe condition which has devastating consequences for a woman's life. The estimation of the burden of fistula at the population level has been impaired by the rarity of diagnosis and the lack of rigorous studies. This study was conducted to determine the prevalence and incidence of fistula in low and middle income countries.METHODSSix databases were searched, involving two separate searches: one on fistula specifically and one on broader maternal and reproductive morbidities. Studies including estimates of incidence and prevalence of fistula at the population level were included. We conducted meta-analyses of prevalence of fistula among women of reproductive age and the incidence of fistula among recently pregnant women.RESULTSNineteen studies were included in this review. The pooled prevalence in population-based studies was 0.29 (95% CI 0.00, 1.07) fistula per 1000 women of reproductive age in all regions. Separated by region we found 1.57 (95% CI 1.16, 2.06) in sub Saharan Africa and South Asia, 1.60 (95% CI 1.16, 2.10) per 1000 women of reproductive age in sub Saharan Africa and 1.20 (95% CI 0.10, 3.54) per 1000 in South Asia. The pooled incidence was 0.09 (95% CI 0.01, 0.25) per 1000 recently pregnant women.CONCLUSIONSOur study is the most comprehensive study of the burden of fistula to date. Our findings suggest that the prevalence of fistula is lower than previously reported. The low burden of fistula should not detract from their public health importance, however, given the preventability of the condition, and the devastating consequences of fistula.

**Database:** Medline

#### **14. Risk factors for obstetric fistula: a clinical review.**

**Author(s):** Tebeu, Pierre Marie; Fomulu, Joseph Nelson; Khaddaj, Sinan; de Bernis, Luc; Delvaux, Thérèse; Rochat, Charles Henry

**Source:** International urogynecology journal; Apr 2012; vol. 23 (no. 4); p. 387-394

**Publication Date:** Apr 2012

**Publication Type(s):** Journal Article Review

**PubMedID:** 22143450

Available at [International urogynecology journal](#) - from SpringerLink - Medicine

Available at [International urogynecology journal](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [International urogynecology journal](#) - from Unpaywall

**Abstract:**Obstetric fistula is the presence of a hole between a woman's genital tract and either the urinary or the intestinal tract. Better knowledge of the risk factors for obstetric fistula could help in preventing its occurrence. The purpose of this study was to assess the characteristics of obstetric fistula patients. We conducted a search of the literature to identify all relevant articles published during the period from 1987-2008. Among the 19 selected studies, 15 were reports from sub-Saharan Africa and 4 from the Middle East. Among the reported fistula cases, 79.4% to 100% were obstetrical while the remaining cases were from other causes. Rectovaginal fistulae accounted for 1% to 8%, vesicovaginal fistulae for 79% to 100% of cases, and combined vesicovaginal and rectovaginal fistulae were reported in 1% to 23% of cases. Teenagers accounted for 8.9% to 86% of the obstetrical fistulae patients at the time of treatment. Thirty-one to 67% of these women were primiparas. Among the obstetric fistula patients, 57.6% to 94.8% of women labor at home and are secondarily transferred to health facilities. Nine to 84% percent of these women delivered at home. Many of the fistula patients were shorter than 150 cm tall (40-79.4%). The mean duration of labor among the fistula patients ranged from 2.5 to 4 days. Twenty to 95.7% of patients labored for more than 24 h. Operative delivery was eventually performed in 11% to 60% of cases. Obstetric fistula was associated with several risk factors, and they appear to be preventable. This knowledge should be used in strengthening the preventive strategy both at the health facility and at the community level.

**Database:** Medline

#### **15. Living with obstetric fistula**

**Author(s):** Aliyu F.; Esegbona G.

**Source:** BMJ (Clinical research ed.); 2011; vol. 342

**Publication Date:** 2011

**Publication Type(s):** Article

**PubMedID:** 21659374

Available at [BMJ \(Clinical research ed.\)](#) - from BMJ Journals - NHS

Available at [BMJ \(Clinical research ed.\)](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [BMJ \(Clinical research ed.\)](#) - from Unpaywall

**Database:** EMBASE

**16. Intrauterine air embolism associated with a rectovaginal fistula in a pregnant woman.**

**Author(s):** Hoppe, Kara K; Fialkow, Michael F; Dighe, Manjiri; Cheng, Edith

**Source:** Obstetrics and gynecology; Aug 2011; vol. 118 (no. 2); p. 481-484

**Publication Date:** Aug 2011

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 21768860

Available at [Obstetrics and gynecology](#) - from Ovid (Journals @ Ovid) - Remote Access

**Abstract:**BACKGROUNDPrevious case reports have reported maternal and fetal mortality in pregnancies complicated by air emboli induced by various mechanisms.CASEA 33-year-old multiparous woman with a known rectovaginal fistula presented with symptoms of placental abruption. She subsequently was found to have a large intrauterine air embolus. The patient was treated successfully to term by continuously draining the vaginal air with a Malecot catheter.CONCLUSIONWe describe a rare case of an intrauterine air embolism during pregnancy caused by a rectovaginal fistula. Prompt recognition of air within the uterine myometrium and subchorionic space during ultrasonography led to the diagnosis and successful treatment of a potentially fatal complication by using an intravaginal Malecot catheter to release the trapped air.

**Database:** Medline

**17. Surgeons should not hesitate to perform episiopectotomy for rectovaginal fistula secondary to cryptoglandular or obstetrical origin.**

**Author(s):** Hull, Tracy L; El-Gazzaz, Galal; Gurland, Brooke; Church, James; Zutshi, Massarat

**Source:** Diseases of the colon and rectum; Jan 2011; vol. 54 (no. 1); p. 54-59

**Publication Date:** Jan 2011

**Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article

**PubMedID:** 21160314

Available at [Diseases of the colon and rectum](#) - from Ovid (Journals @ Ovid) - Remote Access

**Abstract:**BACKGROUND Closure of rectoanovaginal fistula from a cryptoglandular or obstetrical origin can be difficult. Multiple techniques exist and none are perfect. Although episiopectotomy offers the advantage of a simultaneous repair of the sphincter complex, it is a more extensive procedure. A rectal-advancement flap appears less traumatic and divides no perineal tissue or sphincter. The aim of this study was to evaluate the results of episiopectotomy and rectal-advancement flap on healing, postoperative continence, and sexual function.METHODS Data were retrospectively collected regarding 87 women with cryptoglandular or obstetrical rectoanovaginal fistula treated from June 1997 to 2009, who underwent episiopectotomy or rectal-advancement flap at the discretion of the treating surgeon. Healing, use of seton or stoma, number of previous procedures, smoking, age, body mass index, dyspareunia, SF-12 health survey, the IBD Quality of Life, and the Fecal Incontinence Quality of Life, and the Female Sexual Function Index were obtained from our database and via telephone interviews. The Fisher exact probability and  $\chi$  tests were used.RESULTS The mean age of these 87 women was  $42.8 \pm 10.5$  years. Mean follow-up was  $49.2 \pm 39.2$  months. Fifty (57.5%) patients underwent episiopectotomy and 37 (42.5%) underwent rectal-advancement flap. Thirty-nine (78%) patients healed after episiopectotomy vs 23 (62.2%) patients after rectal-advancement flap ( $P = .1$ ). Episiopectotomy was associated with significantly better fecal ( $P < .001$ ) and sexual ( $P = .04$ ) function. There was no significant difference in other studied variables between the 2 techniques.CONCLUSIONS Despite episiopectotomy being a more extensive procedure, healing rates were comparable between episiopectotomy and rectal-advancement flaps. In this select population, episiopectotomy may provide better continence and may confer

better sexual function compared with rectal-advancement flap. In appropriate patients surgeons should not hesitate to perform episiotomy on cryptoglandular or obstetrical-associated rectovaginal fistula.

**Database:** Medline

**18. Obstetric and cryptoglandular rectovaginal fistulas: long-term surgical outcome; quality of life; and sexual function.**

**Author(s):** El-Gazzaz, Galal; Hull, Tracy L; Mignanelli, Emilio; Hammel, Jeffery; Gurland, Brooke; Zutshi, Massarat

**Source:** Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract; Nov 2010; vol. 14 (no. 11); p. 1758-1763

**Publication Date:** Nov 2010

**Publication Type(s):** Journal Article

**PubMedID:** 20593308

Available at [Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract](#) - from SpringerLink - Medicine

Available at [Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract](#) - from ProQuest (Health Research Premium) - NHS Version

**Abstract:** PURPOSE Rectovaginal fistula (RVF) repair can be challenging. Additionally, women may experience sexual dysfunction and psychosocial ramifications even after a successful repair. The aim of this study was to investigate variables looking for predictors of healing/failure and examine long-term quality-of-life (QOL) and sexual function in women with low RVF from obstetrical or cryptoglandular etiology. METHODS From June 1997-2009, 268 women underwent RVF repair. Of those, 100 with obstetric or cryptoglandular etiology agreed to participate in this study. Healing, type of procedure, use of seton or stoma, number of previous procedures, smoking, age, body mass index (BMI), dyspareunia, QOL using SF-12, FIQL, IBS-QOL, and female sexual function index was obtained from our prospective database and telephone contact. Fisher's exact test, chi-square test, and multivariable-logistic-regression model were used to identify the variables associated with healing/failure. RESULTS Mean follow-up was  $45.8 \pm 39.2$  months; mean age  $42.8 \pm 10.5$  years; and BMI was  $28.8 \pm 7.6$ . Sixty (60%) fistulas were obstetric and 40 (40%) cryptoglandular and 68/100 patients (68%) healed. On multivariate analysis, treatment failure was related to a heavier BMI ( $p = 0.001$ ) and number of repairs ( $p = 0.02$ ). Looking at each type of repair, episiotomy had significant healing compared to the other choices (but was not significant on multivariate analysis). Forty-seven women were sexually active at follow-up and 12/47 (25.5%) reported dyspareunia. Fecal incontinence was reported preoperatively in 42 women, more often in those with obstetric-related RVF (76% vs. 24%  $p < 0.05$ ). Healing was not affected by age, smoking, co-morbidities, preoperative seton, or stoma use. Fecal and sexual function and QOL were comparable between women with healed and unhealed RVF. CONCLUSION Patients with higher BMI and more repairs had a decreased healing rate following RVF repair. Despite surgical outcome, QOL and sexual function were surprisingly similar regardless of fistula healing.

**Database:** Medline

### **19. Social implications of obstetric fistula: an integrative review.**

**Author(s):** Roush, Karen M

**Source:** Journal of midwifery & women's health; 2009; vol. 54 (no. 2); p. e21

**Publication Date:** 2009

**Publication Type(s):** Journal Article Review

**PubMedID:** 19249652

Available at [Journal of midwifery & women's health](#) - from Wiley Online Library

**Abstract:**Obstetric fistula is a devastating complication of obstructed labor that affects more than two million women in developing countries, with at least 75,000 new cases every year. Prolonged pressure of the infant's skull against the tissues of the birth canal leads to ischemia and tissue death. The woman is left with a hole between her vagina and bladder (vesicovaginal) or vagina and rectum (rectovaginal) or both, and has uncontrollable leakage of urine or feces or both. It is widely reported in scientific publications and the media that women with obstetric fistula suffer devastating social consequences, but these claims are rarely supported with evidence. Therefore, the true prevalence and nature of the social implications of obstetric fistula are unknown. An integrative review was undertaken to determine the current state of the science on social implications of obstetric fistula in sub-Saharan Africa.

**Database:** Medline

### **20. Obstetric fistula: Current practicalities and future concerns**

**Author(s):** Browning A.

**Source:** International Urogynecology Journal; Mar 2008; vol. 19 (no. 3); p. 333-334

**Publication Date:** Mar 2008

**Publication Type(s):** Editorial

**PubMedID:** 18188490

Available at [International Urogynecology Journal](#) - from SpringerLink - Medicine

Available at [International Urogynecology Journal](#) - from ProQuest (Health Research Premium) - NHS Version

**Database:** EMBASE

### **21. Reflections on the knowledge base for obstetric fistula.**

**Author(s):** Kelly, J; Winter, H R

**Source:** International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics; Nov 2007; vol. 99

**Publication Date:** Nov 2007

**Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article

**PubMedID:** 17765899

**Abstract:**This article presents the reflections of an experienced fistula surgeon and an epidemiologist on the current knowledge base for obstetric fistula. The incidence, prevention, and management of vesico-vaginal and recto-vaginal fistula are discussed. The authors call for more randomized controlled trials to determine the effectiveness of surgical interventions for fistula repair.

**Database:** Medline

## **22. Vesicovaginal fistula: Obstetric causes**

**Author(s):** Ramphal S.; Moodley J.

**Source:** Current Opinion in Obstetrics and Gynecology; Apr 2006; vol. 18 (no. 2); p. 147-151

**Publication Date:** Apr 2006

**Publication Type(s):** Review

**PubMedID:** 16601475

Available at [Current Opinion in Obstetrics and Gynecology](#) - from Ovid (LWW Total Access Collection 2019 - with Neurology)

**Abstract:** Purpose of review: Obstetric fistula has a devastating impact on the lives of women in poor countries. Currently, there is an international campaign by the World Health Organisation, United Nations Population Fund and other bodies to address this problem. This article reviews recent literature and highlights the paucity of evidence-based data. Recent findings: Articles on the pathophysiology, co-morbidities and sequelae including physical injury to 'multiorgan systems' and social consequences associated with obstetric fistula, are discussed. In particular, the devastating social, economic and psychological effects on the health and well-being, reintegration and rehabilitation are addressed. There is a need for prevalence and incidence studies to measure the extent of this problem. The creation of well-equipped fistula centres with multidisciplinary teams to evaluate patients should be the aim. Expert surgeons and optimal databases with personnel to do research will benefit patients. Summary: Prevention should involve alleviation of poverty and improvement in education, maternity services and health. Research on issues such as persistent stress incontinence following fistula closure, management of reduced bladder capacity, best technique for fistula repair, role of vaginoplasty, role of early repair in selective obstetric fistula, future reproductive function, dermatological management, and social and cultural issues must be done to improve women's health. © 2006 Lippincott Williams & Wilkins.

**Database:** EMBASE

## **23. Treatment of rectovaginal fistula: A 5-year review**

**Author(s):** Casadesus D.; Villasana L.; Sanchez I.M.; Diaz H.; Chavez M.; Diaz A.

**Source:** Australian and New Zealand Journal of Obstetrics and Gynaecology; Feb 2006; vol. 46 (no. 1); p. 49-51

**Publication Date:** Feb 2006

**Publication Type(s):** Article

**PubMedID:** 16441694

Available at [Australian and New Zealand Journal of Obstetrics and Gynaecology](#) - from Wiley Online Library

Available at [Australian and New Zealand Journal of Obstetrics and Gynaecology](#) - from Patricia Bowen Library & Knowledge Service West Middlesex University Hospital NHS Trust (lib302631) Local Print Collection [location] : Patricia Bowen Library and Knowledge Service West Middlesex university Hospital.

**Abstract:** This paper presents a chart review of 17 patients who had been treated for rectovaginal fistula (RVF) from 1996 to 2000. In most cases (13; 76.5%), the fistula was the result of post-surgical complications. Following vaginal mucosa advancement flap repair or repair after conversion to a fourth-degree perineal laceration, 16 (94%) of the rectovaginal fistulae (during the first attempted repair or after failed treatment) were successfully treated. In all patients but one, faecal diversion



was avoided. In two patients, fistulography was both a diagnostic procedure and the method of treatment. © 2006 The Royal Australian and New Zealand College of Obstetricians and Gynaecologists.

**Database:** EMBASE

#### **24. Obstetric fistula: A preventable tragedy**

**Author(s):** Miller S.; Lester F.; Webster M.; Cowan B.

**Source:** Journal of Midwifery and Women's Health; 2005; vol. 50 (no. 4); p. 286-294

**Publication Date:** 2005

**Publication Type(s):** Article

**PubMedID:** 15973264

Available at [Journal of Midwifery and Women's Health](#) - from Wiley Online Library

**Abstract:**Obstetric fistula disables millions of women and girls in developing countries, primarily in sub-Saharan Africa and South Asia. The United Nations Population Fund (UNFPA) recently launched a global campaign to end fistula, labeling this condition a preventable and treatable tragedy. Obstetric fistula overwhelmingly results from obstructed labor, which occurs in cases of cephalopelvic disproportion and malpresentation. Cephalopelvic disproportion often complicates deliveries in young, primiparous women of low gynecologic age. Social factors, including young age at marriage and malnutrition of girl children, can also contribute to cephalopelvic disproportion. These social etiologies must be addressed by prevention campaigns. Direct prevention of fistula can occur during delivery when skilled providers identify women and girls at risk for obstetric fistula and link them with innovative interventions, such as Fistula Prevention Centers, through which they can more readily access emergency obstetric care, and by setting strict time limits for laboring at home without progress. Community-based programs, such as the Tostan program in West Africa, use social education to prevent fistula. Moreover, effective surgical techniques for fistula repair are available in some settings and should be expanded to reach those in need. Midwives can play a key role in the prevention and treatment of this tragic obstetric complication. © 2005 by the American College of Nurse-Midwives.

**Database:** EMBASE

#### **25. Supporting surgery for obstetric fistula**

**Author(s):** Coombes R.

**Source:** BMJ (Clinical research ed.); Nov 2004; vol. 329 (no. 7475); p. 1125

**Publication Date:** Nov 2004

**Publication Type(s):** Article

**PubMedID:** 15539658

Available at [BMJ \(Clinical research ed.\)](#) - from PubMed Central

Available at [BMJ \(Clinical research ed.\)](#) - from Unpaywall

**Database:** EMBASE



## **26. The immediate management of fresh obstetric fistulas**

**Author(s):** Waaldijk K.

**Source:** American Journal of Obstetrics and Gynecology; Sep 2004; vol. 191 (no. 3); p. 795-799

**Publication Date:** Sep 2004

**Publication Type(s):** Article

**PubMedID:** 15467543

**Abstract:**Objective It has been a general rule to wait with the repair of an obstetric fistula for a minimum period of 3 months allowing the patient to become an outcast. In a prospective way an immediate management was studied and antibiotics were not used, all according to basic surgical principles. Methods A total of 1716 patients with a fistula duration of 3 to 75 days after delivery were treated immediately on presentation by catheter and/or early closure. Instead of antibiotics, a high oral fluid regimen was instituted. The fistulas were classified according to anatomic and physiologic location in types I, IIAa, IIAb, IIBa, and IIBb, and according to size in small, medium, large, and extensive. The operation became progressively more complicated from type I through type IIBb and from small through extensive. Results At first attempt 1633 fistulas (95.2%) were closed and another 57 could be closed at further attempt(s), accounting for a final closure in 1690 patients (98.5%); 264 patients (15.4%) were healed by catheter only. Of these 1690 patients with a closed fistula, 1575 (93.2%) were continent and 115 (6.8%) were incontinent. The results as to closure and to continence became progressively worse from type I through type IIBb and from small through extensive. Postoperative wound infection was not noted; postoperative mortality was encountered in 6 patients (0.4%). Conclusion This immediate management proves highly effective in terms of closure and continence and will prevent the patient from becoming an outcast with progressive downgrading medically, socially, and mentally. © 2004 Elsevier Inc. All rights reserved.

**Database:** EMBASE

## **27. Obstetric fistulae: A practical review**

**Author(s):** Walley R.L.; Kelly J.; Matthews K.M.; Pilkington B.

**Source:** Reviews in Gynaecological Practice; Jun 2004; vol. 4 (no. 2); p. 73-81

**Publication Date:** Jun 2004

**Publication Type(s):** Review

**Abstract:**Fistula related to childbirth, once prevalent in North America and Europe, remains a significant women's health problem in developing countries today most notably in sub-Saharan Africa. A recent United Nations Report estimates that two million women are living with the condition. Described by the World Health Organisation as the "forgotten disease," the identification of patients, assessment, surgical treatment and rehabilitation remain challenges to gynaecologists and governments responsible for providing adequate resources for treatment and rehabilitation. This article describes the epidemiological, psychological, physical, reproductive and socio-cultural factors associated with obstetric fistulae and its clinical management. Following a discussion of the prevalence, aetiology and diagnosis of the condition, the classifications and sub-classifications of the different types of fistulae, specifically vesico-vaginal and recto-vaginal fistulae, are explained. The section on surgical repair of both types of fistulae covers the pre-operative assessment, timing of the repair and the basic operative principles. Details of the basic technique for repair and the different graft techniques are described. Finally, the authors make a case for the development of special units dedicated to the comprehensive treatment and rehabilitation of women who have obstetric fistulae. As well, these units must provide training units for doctors and, nurses and other health professionals from countries where obstetric fistula as a consequence of birth is prevalent. © 2004 Elsevier B.V. All rights reserved.

**Database:** EMBASE

**28. Transperineal repair of obstetric-related anovaginal fistula.**

**Author(s):** Chew, Simon S B; Rieger, Nick A

**Source:** The Australian & New Zealand journal of obstetrics & gynaecology; Feb 2004; vol. 44 (no. 1); p. 68-71

**Publication Date:** Feb 2004

**Publication Type(s):** Comparative Study Journal Article

**PubMedID:** 15089873

Available at [The Australian & New Zealand journal of obstetrics & gynaecology](#) - from Wiley Online Library

**Abstract:**BACKGROUNDTo describe an operative technique for the repair of anovaginal fistulae secondary to obstetric injury and to assess its functional outcome and patient satisfaction.METHODSAn operative repair involving division of the anovaginal fistula, closure of rectal and vaginal walls, anterior levatoplasty and overlapping sphincteroplasty is described. Postoperative complications and recurrence were recorded. A telephone interview was carried out to assess the functional outcome and the satisfaction score.RESULTSSeven consecutive patients had a repair of an obstetric-related anovaginal fistula. Their mean age was 34 years (range: 22-72). They had a mean duration of symptoms of 14 months (range: 1.5-54). Four patients did not have any previous repair and no stoma was necessary in any of the seven patients. There was no significant postoperative complication and only one recurrence. Telephone interviews were conducted for six patients and one was lost to follow-up. The mean follow-up period was 24 months (11-35). The Wexner's continence score improved from a mean preoperative score of 13.4 to a mean postoperative score of 5.6. With satisfaction scores ranging from +3 to -3 (+3 indicating complete satisfaction and -3 indicating complete dissatisfaction), five patients scored 1 and one scored 0.CONCLUSIONThis technique is straightforward and effective in healing obstetric-related anovaginal fistula. It achieves improved continence and reasonable satisfaction.

**Database:** Medline

### **29. Surgical treatment of rectovaginal fistula of obstetric origin: a review of 15 years' experience in a teaching hospital.**

**Author(s):** Rahman, M S; Al-Suleiman, S A; El-Yahia, A R; Rahman, Jessica

**Source:** Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology; Nov 2003; vol. 23 (no. 6); p. 607-610

**Publication Date:** Nov 2003

**Publication Type(s):** Journal Article

**PubMedID:** 14617459

**Abstract:**Fifty-two women with a rectovaginal fistula were managed over a period of 15 years. All the fistulae were caused by obstetric injury commonly resulting from breakdown of the repair of complete perineal tears or from unrecognised injury during forceps or precipitate delivery. In five patients the fistula healed spontaneously within 12 weeks of the injury. Thirty-nine patients underwent transvaginal purse-string repair by standard technique and eight patients had perineoproctotomy and sphincteroplasty for large fistulae associated with anal incontinence. Surgical repair was successful in all the 47 patients including two patients who had previous failed repair elsewhere. The routine postoperative follow-up period of the patients ranged between 6 months and 8 years. There were no residual symptoms of anal sphincter weakness in the patients treated with transvaginal purse-string repair. Two of the patients who underwent perineoproctotomy and sphincteroplasty complained of varying degrees of postoperative incontinence of flatus that resolved by 8 weeks postoperation. In our experience the transvaginal purse-string method of repair for small, low rectovaginal fistulae proved highly satisfactory with 100% cure rate. Perineoproctotomy and sphincteroplasty for larger fistulae associated with anal incompetence was equally successful with minimal postoperative morbidity.

**Database:** Medline

### **30. Urinary and faecal incontinence following delayed primary repair of obstetric genital fistula.**

**Author(s):** Murray, Christine; Goh, Judith T; Fynes, Michelle; Carey, Marcus P

**Source:** BJOG : an international journal of obstetrics and gynaecology; Jul 2002; vol. 109 (no. 7); p. 828-832

**Publication Date:** Jul 2002

**Publication Type(s):** Journal Article

**PubMedID:** 12135221

Available at [BJOG : an international journal of obstetrics and gynaecology](#) - from Wiley Online Library

**Abstract:****OBJECTIVE**To evaluate: (1) the factors associated with the development of obstetric genitourinary fistula, (2) the incidence of urinary and faecal incontinence following closure of the fistula and (3) the urodynamic findings in women with persistent urinary incontinence.**DESIGN**An observational clinical study.**SETTING**A specialised fistula unit in a developing country.**POPULATION**Women following successful anatomical closure of obstetric genitourinary fistula.**METHODS**Fifty-five women were enrolled from the Fistula Hospital in Ethiopia, following obstetric fistula repair. Their case records were reviewed and details regarding (1) antecedent obstetric factors, (2) the site, size and type of fistula and (3) pre-operative bladder neck mobility and vaginal scarring were recorded. All women were questioned regarding symptoms of faecal and urinary incontinence. Women reporting urinary incontinence following fistula repair underwent urodynamic investigations.**MAIN OUTCOME MEASURES**Clinical and urodynamic assessment.**RESULTS**The mean age of the women was 23 years (range 16-45 years). The fistula in 38

women (69%) followed the first delivery and in 17 women (31%) following a subsequent delivery. The mean duration of labour was four days (range 1-9 days). Forty-four women (80%) had an isolated vesico-vaginal fistula and 11 (20%) had a combined vesico-vaginal and recto-vaginal fistula. The mean diameter of the fistula was 2.9 cm (0.5-6 cm). Successful repair occurred in all women. Thirty women (55%) reported persistent urinary incontinence and 21 (38%) altered faecal continence at follow up. In the former group, urodynamic investigations identified genuine stress incontinence in 17 women (31%), detrusor instability in two (4%) and mixed incontinence in 11 (20%).**CONCLUSION** This study demonstrates the high rate of successful closure of the fistula in a specialised fistula unit, but highlights the problem of persistent urinary incontinence following closure.

**Database:** Medline

### **31. Obstetric fistula: evaluation with ultrasonography.**

**Author(s):** Adetiloye, V A; Dare, F O

**Source:** Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine; Apr 2000; vol. 19 (no. 4); p. 243-249

**Publication Date:** Apr 2000

**Publication Type(s):** Journal Article

**PubMedID:** 10759347

Available at [Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine](#) - from HighWire - Free Full Text

**Abstract:** Twenty-two patients with 24 fistulae were examined prospectively with real-time sonography. Sonographic findings were compared with those of intravenous urograms and correlated with the findings at examination under anesthesia and at surgery. Various genital abnormalities not revealed by intravenous urography were demonstrated by sonography preoperatively. These included cervical injuries, vesicovaginal fistula showing "flat tire" sign and hourglass deformities, and identification of the site, size, and course of fistulae in seven (29%) of the cases. However, the demonstration of the fistulae by sonography is poor relative to that of examination under anesthesia, in which 21 (87%) of the fistulae were identified. The factors responsible for the difficulty in demonstrating the fistulae on sonography, which included size and multiplicity, are discussed. Sonography is complementary to examination under anesthesia in preoperative evaluation of the patients with obstetric fistulae in general and in those with previous unsuccessful repairs in particular.

**Database:** Medline

### **32. Surgical options for rectovaginal fistulas secondary to obstetrical injury**

**Author(s):** Sullivan B.; Lowry A.C.

**Source:** Seminars in Colon and Rectal Surgery; 1999; vol. 10 (no. 1); p. 17-25

**Publication Date:** 1999

**Publication Type(s):** Article

**Abstract:**Obstetric injury is the most frequent cause of rectovaginal fistulas in many series. The fistulas are a result of an unrecognized fourth-degree laceration or a failed repair. It is clear from the mechanism of injury that a concomitant sphincter defect is frequently present. Therefore, attention must be paid to the patient's continence and anal sphincter status during the history and investigation. The choice of repair should be tailored to the fistula and status of the sphincter muscle. Several techniques are available without clear evidence of superiority of one technique.

**Database:** EMBASE

### **33. Genital tract fistula repair on 116 women.**

**Author(s):** Goh, J T

**Source:** The Australian & New Zealand journal of obstetrics & gynaecology; May 1998; vol. 38 (no. 2); p. 158-161

**Publication Date:** May 1998

**Publication Type(s):** Journal Article

**PubMedID:** 9653850

Available at [The Australian & New Zealand journal of obstetrics & gynaecology](#) - from Wiley Online Library

**Abstract:**A personal series of 130 genital tract fistula repairs in 116 women is presented. All fistulas were repaired vaginally. The majority of the fistulas were due to obstetric injuries, especially prolonged obstructed labour. Obstetric fistula continue to be a cause of personal and social morbidity to sufferers.

**Database:** Medline

### **34. The obstetric fistula and peroneal nerve injury: An analysis of 947 consecutive patients**

**Author(s):** Waaldijk K.; Elkins T.E.

**Source:** International Urogynecology Journal; 1994; vol. 5 (no. 1); p. 12-14

**Publication Date:** 1994

**Publication Type(s):** Article

Available at [International Urogynecology Journal](#) - from SpringerLink - Medicine

**Abstract:**Peroneal nerve injury, resulting in leg weakness and foot drop, is seen frequently after long, obstructed labor that has caused an obstetric vesicovaginal fistula. Nine hundred and forty-seven consecutive patients treated in northern Nigeria for obstetric fistulas were reviewed for the presence of peroneal nerve trauma. The first 470 patients were reviewed retrospectively, and 25 (5.3%) were noted to have presented with significant motor weakness. The next 470 patients were prospectively evaluated by both history and physical examination. In this group, 311 (64.9%) women had either a history or current signs of peroneal nerve injury at the time of admission for fistula repair. Injuries were more common on the right side and were more commonly apparent in the first 2 years after the obstetric trauma causing the fistula.

**Database:** EMBASE

### **35. Episiotomy: risks of dehiscence and rectovaginal fistula.**

**Author(s):** Homsí, R; Daikoku, N H; Littlejohn, J; Wheelless, C R

**Source:** Obstetrical & gynecological survey; Dec 1994; vol. 49 (no. 12); p. 803-808

**Publication Date:** Dec 1994

**Publication Type(s):** Journal Article Review

**PubMedID:** 7885655

**Abstract:**The obstetric literature was reviewed to assess the risk of episiotomy dehiscence and rectovaginal fistula formation from routine episiotomy, with and without third- and fourth-degree laceration into the rectal sphincter or rectal mucosa, respectively. Strong evidence suggests that elective episiotomy predisposes to severe 3rd and 4th degree perineal lacerations and that episiotomy dehiscence with rectovaginal fistula formation is strongly related to 3rd and 4th degree perineal lacerations.

**Database:** Medline

### **36. Genitourinary reconstruction in obstetric fistulas.**

**Author(s):** Arrowsmith, S D

**Source:** The Journal of urology; Aug 1994; vol. 152 (no. 2); p. 403-406

**Publication Date:** Aug 1994

**Publication Type(s):** Journal Article

**PubMedID:** 8015081

**Abstract:**Although most recent literature concerning female urinary tract fistulas has addressed the problem of postoperative and post-irradiation fistula, obstetrical fistula is more common worldwide. A series of fistula repairs predominantly caused by obstructed labor is presented. During a 30-months interval 139 procedures were performed on 98 patients with fistulas at a variety of anatomical locations or on patients with type III urinary incontinence following fistula repair. The fistulas were caused by obstructed labor in 94.9% of the patients. Repair was done vaginally in 110 cases, abdominally in 25 and by a combined approach in 3. Of the patients 81% were dry after 1 procedure and all but 4% were dry after multiple procedures. The subjective observations of moderate to severe vaginal scarring, or severe damage to the urethra or bladder neck were the best predictors of adverse outcome.

**Database:** Medline

### **37. Rectovaginal fistula or perineal and anal sphincter disruption, or both, after vaginal delivery.**

**Author(s):** Tancer, M L; Lasser, D; Rosenblum, N

**Source:** Surgery, gynecology & obstetrics; Jul 1990; vol. 171 (no. 1); p. 43-46

**Publication Date:** Jul 1990

**Publication Type(s):** Journal Article

**PubMedID:** 2193413

**Abstract:**The management of 52 patients with rectovaginal fistula or perineal and anal sphincter disruption, or both, after vaginal delivery is presented. Adequate physical intestinal preparation and postoperative diet and intestinal care are stressed. Preservation of perineal integrity is suggested whenever possible. Closure in anatomic layers is the technique of choice and sphincterotomy is advised in all instances of anal sphincter anastomosis. The technique for repair of an extensive cloacalike lesion is described in detail, as are three unusual complications of operation. Satisfactory anatomic and functional results were obtained in 100 per cent.

**Database:** Medline

## Strategy 753309

#	Database	Search term	Results
1	Medline	("rectovaginal fistul*" OR "Anorectal vaginal fistul*").ti,ab	1216
2	Medline	exp "RECTOVAGINAL FISTULA"/	1480
3	Medline	(1 OR 2)	2044
4	Medline	(obstetric* OR pregnan*).ti,ab	535326
5	Medline	exp OBSTETRICS/	22116
6	Medline	exp PREGNANCY/	875257
7	Medline	(4 OR 5 OR 6)	1011950
8	Medline	(3 AND 7)	362
9	Medline	(labour OR labor).ti,ab	96194
10	Medline	exp "OBSTETRIC LABOR COMPLICATIONS"/	66964
11	Medline	(9 OR 10)	145728
12	Medline	(3 AND 11)	145
13	EMBASE	("rectovaginal fistul*" OR "Anorectal vaginal fistul*").ti,ab	1791
14	EMBASE	exp "RECTOVAGINAL FISTULA"/	2861
15	EMBASE	(13 OR 14)	3163
16	EMBASE	(labour OR labor OR pregnan* OR obstetric*).ti,ab	757380
17	EMBASE	exp "OBSTETRIC PATIENT"/	1706
18	EMBASE	exp "LABOR COMPLICATION"/	180697



19	EMBASE	exp "PERINEUM INJURY"/	2648
20	EMBASE	exp PREGNANCY/	644505
21	EMBASE	(16 OR 17 OR 18 OR 19 OR 20)	1077209
22	EMBASE	(15 AND 21)	571
23	EMBASE	22 [English language]	522
24	Medline	(obstetric ADJ2 fistul*).ti,ab	530
25	Medline	(3 AND 24)	136