

# Cesarean Scar Defect: A Silent and Growing Complication

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The cesarean section scar defect, also known as an *isthmoceles*, is a pouch-like anatomic defect in the anterior wall of the uterine isthmus located at the site of a previous cesarean delivery scar. Since the late 2000s, there has been an increasing rate of cesarean section scar defects due to a significant increase in the prevalence of cesarean sections in the World, followed by issues with postmenstrual abnormal uterine bleeding and dysmenorrhea [1]. The presence of a cesarean scar defect is associated with secondary infertility, as blood and debris in the pouch may negatively affect the quality of cervical mucus, sperm motility, and embryo implantation. Nonetheless, how these defects potentially affect infertility is unclear. Studies have shown that cesarean delivery is associated with a lower subsequent birth rate than vaginal births [2]. Most studies on cesarean scar defects in patients with a history of a prior cesarean section noted a prevalence between 24% and 70% when a pelvic ultrasound is done, with 56% and 84% when a *sonohysterogram* is performed, with the higher rates more associated with symptomatic patients and increased number of cesarean surgeries [3]. The management of CSD can be pharmacological, which consists of contraceptive hormonal treatment or surgical. The surgical management includes hysteroscopy and laparoscopic management to repair these niches, which involves resecting the edges of the niches to cut out fibrotic tissue and then ablating the bottom of the pouch to help contract it [4]. Although, some have criticized this management because it risks thermal injury to the adjacent bladder and vagina and does not strengthen and thicken the residual myometrial interface. The laparoscopic and hysteroscopic approach might be the most effective but requires a skilled surgeon and advanced instruments [5]. CSD is considered a common clinical condition lately. However, there is a lack of studies on the associations between CSD and pelvic pain, dysmenorrhea, and infertility. Notwithstanding, the efficacy of vaginal surgery is yet to be observed. Currently, laparoscopic and hysteroscopic resecting of the edges of niches are studied as the most popular therapy. We still need randomized controlled trials to acquire specific evidence for effective diagnosis and treatment for CSD. These medical approaches should be considered for specific patients until an optimal treatment for symptomatic women with CSD is established.

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