





Surgery – Vulvoplasty for Chronic UTIs & Dermatitis

<p>Definition</p>	<p>Vulvoplasty (or epispioplasty), is the surgical excision of the redundant perivulvar skin folds (skin and deep subcutaneous tissues) dorsally and laterally to the vulvar opening. This reconstructive surgical procedure that removes these skin folds provides better ventilation of the perivulvar area to eliminate moist dermatitis and bacteria.</p>
<p>Why is Vulvoplasty Surgery Performed?</p>	<p>The two most common conditions that vulvoplasty is indicated for is chronic, recurrent urinary tract conditions and perivulvar dermatitis. The redundant perivulvar skin folds act like a dam and enables urine retention. Moisture, body heat, darkness and accumulation of skin debris create an ideal environment within the skin folds for bacteria to proliferate and cause local infection. Friction between the two skin surfaces causes microtrauma, which adds to self-trauma via licking and scooting. This leads to skin fold dermatitis or pyoderma. In turn, secondary vestibulitis, vaginitis or ascending UTIs have been reported. At worst, urinary incontinence can occur.</p>
<p>Signalment and Clinical Signs</p> 	<p>The typical dog with this condition is an overweight female dog with a hypoplastic or recessed vulva. Brachycephalic breeds (English Bulldogs, Chinese Pugs, and Boston Terriers) may be predisposed due to their body conformation. In one study, the mean weight was 71 pounds,¹ whereas another study reported medium to giant breeds at more risk, but any obese small breed dog or dog with a juvenile recessed vulva is also at risk.² In both studies, the mean age was approximately 3.5 years. Common complaints from owners include excessive licking of the vulvar area, scooting, malodor, hematuria and sometimes urinary incontinence. Mean duration of clinical signs was over one year in both studies, which confirms that this condition is easy to overlook. It is important to include it in the differential diagnosis of chronic UTIs.</p>
<p>Diagnosis</p>	<p>Diagnosis is confirmed by careful observation of the redundant skin folds and the perivulvar dermatitis and the history of recurrent urinary tract infections. It is important to rule out other causes of UTIs such as ectopic ureters, patent urachal remnant or hymen, urolithiasis, bladder neoplasia, or chronic inflammatory bladder diseases.</p>
<p>Treatment</p>	<p>Medical management is considered palliative and entails using systemic antibiotics, topical treatments, and weight loss. Definitive treatment is vulvoplasty surgery.</p>
<p>Prognosis</p> 	<p>If the procedure is done correctly, the prognosis of a vulvoplasty procedure is excellent. The main complication I have seen when inexperienced surgeons perform this surgery is incorrect or insufficient removal of tissue. Dr. Gores promotes the use of the CO₂ laser in this surgery to minimize bleeding, thereby increasing visualization and accuracy of sufficient tissue removal as well as decreasing postoperative bruising, edema, swelling and discomfort. At VSCT, we also utilize the Class IV therapy laser on these postoperative perivulvar incisions to improve incisional healing and patient comfort.</p>
<p>References</p>	<ol style="list-style-type: none"> 1. BA Lightner et al. "Epispioplasty for the treatment of perivulvar dermatitis or recurrent urinary tract infections in dogs with excessive perivulvar skin folds: 31 cases (1983-2000)." JAVMA 2001, Vol. 219, N. 11, p. 1577-1581. 2. AP Hammel and DE Bjorling. "Results of Vulvoplasty for Treatment of Recessed Vulva in Dogs." JAAHA 2002, Vol. 38, N.1, p. 79-83.
<p>Questions? Surgical Experts: Jim Boulay, DVM, MS, DACVS Barb Gores, DVM, DACVS Sharon Shields, DVM, DACVS</p>	<p>The Veterinary specialty Center of Tucson has board-certified surgeons available for questions and consultations on surgical conditions during the weekdays. A member of the surgery team is on-call 24/7 to provide consultations to VSCT emergency doctors and to perform emergency surgery for patients seen by the VSCT emergency service. Board-certified surgeons have four additional years of training and are certified by the American College of Veterinary Surgeons to assure competency in advanced veterinary surgery.</p>