

# Giant Condyloma Acuminata in Pregnancy: Case Report

## Gebelikte Dev Kondiloma Aküminata: Olgu Sunumu

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### ABSTRACT

Condyloma acuminata is a disease that is frequently seen in the perianal and genital area. It can be transmitted by sexual intercourse, in which the agent is usually the human papillomavirus. Although giant condyloma acuminata is often with benign histology, may rarely develop squamous cell carcinoma may rarely develop or it may progress as a locally aggressive disease. Due to the physiological changes during pregnancy, the growth rates are relatively higher in pregnant women than non-pregnant women. Even though there are many treatment methods for giant condyloma acuminata, many results are not very satisfactory and local recurrence rates are quite high. In this report we are presenting a successful treatment of a 14-week pregnant patient with surgical excision.

**Keywords:** Condyloma acuminata, HPV, pregnancy

### ÖZET

Kondiloma aküminata perianal ve genital bölgede sıklıkla görülen bir hastalıktır. Ajan genellikle insan papilloma virüsüdür ve cinsel ilişki yoluyla bulaşabilir. Dev kondiloma aküminata sıklıkla benign histolojiye sahip olmasına rağmen skuamöz hücreli karsinom nadiren gelişebilir veya lokal agresif bir hastalık olarak ilerleyebilir. Gebelik sırasındaki fizyolojik değişiklikler nedeniyle gebe kadınlarda büyüme oranları gebe olmayan kadınlara göre nispeten daha yüksektir. Dev kondiloma aküminatanın birçok tedavi yöntemi olmasına rağmen çoğu sonuç tatmin edici değildir ve lokal nüks oranları oldukça yüksektir. Bu raporda 14 haftalık gebe bir hastada görülen dev kondiloma aküminatanın cerrahi eksizyonla başarılı tedavisini sunuyoruz.

**Anahtar Kelimeler:** Kondiloma aküminata; HPV; gebelik

Among the most common sexually transmitted diseases in developed countries, the cause of genital warts, also known as condyloma acuminata, is low-risk oncogenic human papillomavirus (HPV) types 6 and 11. It is characterized by a cauliflower-shaped, progressive invasive growth and a benign histological pattern. Although condyloma acuminata may occur at any age, it is more common in the young population especially in their 20s due to high rate of sexual activity. Even though sexual transmission is frequent asexual transmission has also been shown.<sup>1,2</sup>

Vertical transmission from mother to baby during birth, autoinoculation from warts in other parts of the body, passage through contaminated surfaces and objects are among the asexual transmission routes.

Progress of condyloma acuminata to a Buskhe-Levenstein tumor (BLT) is extremely rare. It is seen in only 0.1% of sexually active people. Generally, BLT develops in an indolent form. However, rapidly growing BLT cases have been reported during pregnancy.

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Risk factors for GCA (Giant condyloma acuminata) include poor hygiene, local irritation, immunosuppression, HIV infection, multiple sexual partners, and anal intercourse. The perineum, vulva, vagina, perianal area and rectum are the most frequently affected areas.<sup>3</sup>

It has been reported that condyloma acuminata during pregnancy tends to proliferate due to physiological changes in the external genitalia and some immunological factors that accelerate HPV replication. Additionally during delivery, condyloma acuminata may cause severe bleeding, complicate laceration repairs due to obstetric trauma, and increase the risk of neonatal HPV infection.

Studies have shown that vertical transmission of HPV to the baby occurs during the baby's passage through the infected birth canal especially in cases with premature rupture of membranes. The healing process and treatment are complex due to the locally aggressive behavior of the lesions and the relatively high recurrence rates.<sup>4</sup>

In this report, we presented a case of surgical resection of the condyloma acuminata covering the perineal and perianal regions in a 14-week pregnant woman.

## CASE REPORT

A 22-year-old primigravid female patient was admitted to our clinic with a palpable mass in the vaginal area and severe pain in the perianal and perineal area at the 14<sup>th</sup> gestational week of her pregnancy. On physical examination, wide-based irregular verrucous vegetations with malodor covering the perineal, perianal, and periurethral regions were observed (Figure 1). The lesion size in the perineal region was measured as 5\*2.5 cm and 2.5\*1 cm in the perianal region. Again, in the periurethral region, 4 to 5 wide-based lesions, 1.5\*1 cm in size, were observed. HPV and smear test was performed on the patient at 4-5<sup>th</sup> weeks of pregnancy due to genital condyloma. The smear result of the patient, whose HPV 16 and HPV 44 types were positive, were reported as inflammatory manifestations. During this period, the patient avoided the intervention because she was worried about harming her baby.



FIGURE 1: Wide based verrucous vegetations in perianal, perineal, and periurethral regions.

During this period, the existing condylomas grew rapidly and covered the perianal and perineal areas. As the existing lesions grew and caused severe perineal pain in the patient, condyloma excision was planned for the patient at the 14<sup>th</sup> week of pregnancy under spinal anesthesia. The patient underwent en-bloc excision of the lesions with the help of electric cautery. Superficial tissue damage was repaired with 3/0 vicryl sutures after the operation (Figure 2). Resected mass was sent to pathology for sectioning and staining. Fetal heartbeats were checked with USG after the operation. Since the patient described cyclic pain postoperatively and cervical dilation was not observed in the examination, prophylactic 100 mg rectal indomethacin and 1 hydroxyprogesterone hexanoate ampoule was administered to the patient through the IM route. The pathology report revealed immunohistochemical HPV positive cells in the squamous epithelium and parakeratosis and viral cytopathic effect (koilocytosis) of HPV in the epithelium (Figure 3, Figure 4). The patient was informed about HPV and condylomas at discharge. Information was given about recurrences. It was explained that she should not neglect her treatment and follow-up visits. There was no recurrence in the postoperative period. The patient was delivered by cesarean section in the 39<sup>th</sup> week.



FIGURE 2: Repair and reconstruction of the perineum.

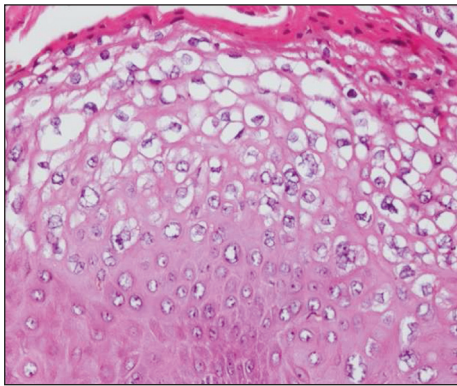


FIGURE 3: Viral cytopathic effect in the epithelium (koilocytosis), \*200.

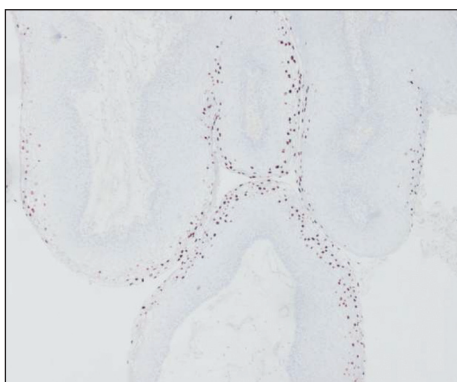


FIGURE 4: Immunohistochemical HPV positive cells in squamous epithelium.

## DISCUSSION

The incidence of perianal and perineal giant condyloma acuminata has increased in the last decade. It is

difficult to distinguish from other condylomas and squamous cell carcinoma, and the possible viral agents are HPV subtypes 6-11 and 13-15.<sup>5</sup> The therapeutic aim in giant condyloma acuminata is the elimination of the visible wart, HPV virus eradication, and strengthening of the immune system. However, both doctors and patients are often disappointed when they do not get desired results from the treatments. Topical, systemic, and surgical treatment options are available for giant condyloma acuminata. However, no treatment method is effective in preventing recurrences. Other known alternative treatments include CO<sub>2</sub> laser, electrocoagulation, radiation, intralesional INF- $\alpha$  injection, and topical imiquimod.<sup>6</sup> The size, location, distribution, and frequency of the lesion is crucial in determining the treatment method for condyloma acuminata during pregnancy. No data has shown the superiority of treatment options. Patients should be informed about success rates, risks, and complications of treatment methods.<sup>7</sup> Treatment of condyloma acuminata in pregnancy continues to be controversial. However, surgery appears to be the best option among the available treatments. Skin reconstruction with extended surgical excision/radical local excision has been defined as the primary treatment modality. In our case, the condyloma acuminata lesions with a wide base was excised en-bloc from the pedicle with the help of electric cautery. Perianal and perineal recurrence risk after surgical excision has been reported as 60-66%. Also, the mortality rate has been reported as 20-30% due to the tendency to fistula formation with bacterial colonization that causes hemorrhagic and septic complications. Malignancy has been shown to develop in 30-56% of the cases. Distinctive histological pattern with loss of normal maturation, groups of neoplastic cells invading the underlying stroma, and several mitotic figures with frequent abnormal mitoses increases the possibility of malignancy.<sup>8</sup> The possibility of re-infection and recurrence is quite high in patients with inadequate excision. In our 14-week pregnant case, all visible lesions were excised. The patient's follow-up in terms of recurrence and re-infection should not be neglected.

Surgical procedures in pregnant women often trigger the stress response and are associated with



miscarriage, preterm delivery, and associated adverse perinatal outcomes. For this reason, it is recommended to minimize surgical interventions during pregnancy.<sup>9</sup> Progesterone is a critical hormone for the continuation of pregnancy. Intramuscular progesterone administration may prolong the gestation period in women at risk of preterm delivery.<sup>10</sup> Indomethacin, on the other hand, is a nonsteroidal anti-inflammatory (NSAID) and when used in low doses, it can suppress signs of preterm labor such as cervical shortening and elevation of fetal fibronectin.<sup>11</sup> Although there was no cervical dilatation in our case, prophylactic endol and proluton administration was performed due to the patient's description of postoperative cyclic pain.

With this case report, we wanted to remind the necessity of surgical excision of large-sized condyloma acuminata lesions at the beginning of the 2<sup>nd</sup> trimester of the pregnancy before they become larger and more complicated in the following weeks.

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### Conflict of Interest

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

### Authorship Contributions

**Idea/Concept:** Gürkan Kıran, Fatma Başak Tanoğlu; **Design:** Fatma Başak Tanoğlu, Çağlar Çetin; **Control/Supervision:** Fatma Başak Tanoğlu, Ayşe Filiz Gökmen Karasu; **Data Collection and/or Processing:** Gürkan Kıran, Çağlar Çetin; **Analysis and/or Interpretation:** Fatma Başak Tanoğlu, Gürkan Kıran; **Literature Review:** Çağlar Çetin, Ayşe Filiz Gökmen Karasu, Fatma Başak Tanoğlu; **Writing the Article:** Fatma Başak Tanoğlu, Çağlar Çetin.

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