# A Case Report of Bartholin Gland Carcinoma: Unexpected Therapeutic Response to Radiotherapy

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*Primary carcinoma of the bartholin gland is an uncommon lesion accounting for 2 to 7% of vulvar neoplasms and less than 1% of all female genital tract malignancies. We present a 42-year-old patient who underwent excisional biopsy followed radiotherapy for the bartholin gland carcinoma . She has no evidence of disease for ten years.*

***Key words:*** *Bartholin gland carcinoma, vulva, radiotherapy*

## Bir olgu nedeniyle Bartholin bez kanseri: Radyoterapiye beklenmeyen cevap

*Bartholin bezinin primer kanseri nadir görülen bir lezyon olup, vulva kanserlerinin %2-7'si, genital bölge kanserlerinin ise %1'den az bir kısmından sorumludur. Çalışmamızda Bartholin bez kanseri olup, eksizyonel biyopsiyi takiben radyoterapi uygulanan ve tedavi, sonrası 10 yıldır primer hastalığı ile ilgili bulguya rastlanmayan 42 yaşındaki bir hastayı sunduk.*

***Anahtar kelimeler:*** *Bartholin bez kanseri, vulva, radyoterapi*

Primary carcinoma of the bartholin gland is an uncommon lesion accounting for 2 to 7% of vulvar neoplasms and less than 1% of all female genital tract malignancies. (1) Various modalities of therapy have been suggested such as radical vulvectomy and lymphadenectomy, and radiotherapy. In recent years, less radical procedures including hemivulvectomy or wide local excision with or without irradiation therapy, have been promoted to decrease morbidity. (2-4) Radiotherapy may play a major role in the treatment of these patients decreasing the incidence of local and regional failures after wide local excision in patients with stage I and II tumors.(5) In this report we present a patient who received irradiation alone for stage II Bartholin gland carcinoma. The planned surgery was canceled as there was no evidence of disease at the completion of radiotherapy. She received no further therapy, and no evidence of disease 10 years after primary therapy.

## Case Report

A 42-year-old Iranian female had a 1.5 year history of vulvar lesion which was first noted when it was "pea sized". It was near an old episiotomy scar (from a delivery 11 years previously) in the region of the labia majora. It gradually grew to about 1X2 cm in size and became pruritic especially when dampened with urine. She underwent excisional biopsy of the vulvar lesion. The pathology report was read as " apocrine gland carcinoma at the Mayo Clinic. She came to

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M.D Anderson Cancer Center for the further evaluation. Pelvic examination revealed there was a scar extending from the left labium majus into the vagina representing an old episiotomy scar in the left posterior introitus. Rectovaginal examination was unremarkable, and no palpable pelvic masses.

Pathologic report revealed moderately well differentiated adenocarcinoma in dermis and squamous submucosa designated from vulva, probably bartholin gland carcinoma at our hospital.The patient received 45 Gy tumor doses to the whole pelvis and inguinal region with fall over the perineum. The anterior portal was treated with 6MV photons 180 rads given dose and the posterior portal was treated with 25 MV photons quantity sufficient to bring the midline dose to 180 rads per fraction. Following this treatment the patient received an iridium needle implant. Three 6 cm length needles were inserted into the area of her previous excision and loaded with 5.5 cm active length iridium needles of 1.266 mCi per cm. This was 0.7673 mg radium equivalent per cm. This was left in place for 25 hours delivering 1500 rads at 60 rads per hour to the tumor volume. At the completion of radiotherapy the patient had no evidence of disease.

She underwent vulvar biopsy after radiotherapy. Pathologic report revealed no evidence of disease. She has also no evidence disease for ten years, and receives premarin 0.625 mg/d and provera 10 mg/d for hormone replacement therapy.

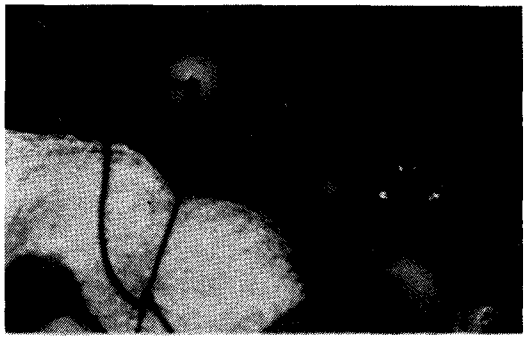

**Figure 1.** Iridium needle implants on the vulva

## Discussion

Bartholin's gland carcinomas have been reported in patients as young as 18 years and as old 91 years, but the mean age is about 52 years.(6) Adenocarcinoma and squamous cell carcinoma are the most common histologic types of the Bartholin gland carcinoma, representing 87% of cases.

The original diagnostic criteria of the Bartholin gland carcinoma were described by Honan in 1987.(7). These criteria included: 1) correct anatomic position of the tumor, 2) Intact overlying skin, 3) location of the tumor deep in the labium majus, 4) presence of some normal glandular elements. However, advanced tumors with ulceration of the skin, or tumors that completely replace the normal elements of the gland, therefore these criteria would fail to meet. The new criteria were developed by the Armed Forces Institute of Pathology and recently advocated by Copeland et al. (8) These new criteria include : 1) areas of apparent transition from normal to neoplastic elements, 2) histologic type of tumor consistent with Bartholin's gland origin, and 3) no evidence of a concurrent primary tumor elsewhere.

Although traditional therapy was radical vulvectomy and bilateral lymphadenectomy, currently less radical surgery is popular in treatment of bartholin gland carcinoma. Copeland et al (8) reported 36 patients with the Bartholin gland carcinoma who underwent various surgical procedures. Of 36 patients, 12 had hemivulvectomy or wide excision, with or without irradiation, as treatment for the primary lesion. The 5-year survival was 84%. Postoperative radiation reduced the incidence of local recurrence. One of 14(7%) patients receiving radiation and six of 22(27%) patients not receiving radiation developed local recurrences.

In the present report, the patient underwent irradiation therapy alone after biopsy of lesion. She has no evidence of disease for ten years. As seen in previous reports, radiotherapy may have a very important role in the treatment of bartholin gland carcinomas. Less radical surgery is possible with less morbidity if radiotherapy is scheduled in the treatment plan.

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