

# Labial Leiomyoma: A Case Report

Somsri Pitukkijronnakorn, MD\*,  
Paisan Leelachaikul, MD\*\*, Apichart Chittacharoen, MD\*

\* Department of Obstetrics & Gynaecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University

\*\* Department of Pathology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University

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*Leiomyoma is common in the myometrial layer of the uterus, and rarely found in other genital organs. Previous reports show multiple sites of leiomyoma outside the uterus eg. vagina, oral mucosa or mandible vascular leiomyoma. Leiomyoma is normally a benign smooth muscle tumor and behaves as a hormone sensitive tumor. Leiomyomas develop during the reproductive age and regress after menopause. The case of a 25 year old female with a large left labial leiomyoma presented as Bartholin's cyst. Illustrates the diagnostic difficulties in such cases. The management in this case was surgical excision. The definite diagnosis was confirmed by histologic examination as a labial leiomyoma.*

**Keywords:** Labial mass, labia majora, leiomyoma

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The most common finding of a leiomyoma is in the myometrial layer of the uterus, and is rarely found in other genital organs<sup>(1)</sup>. Previous reports have shown multiple sites of leiomyoma outside the uterus eg. vagina, oral mucosa or mandible vascular leiomyoma<sup>(2-8)</sup>, there was no report of labial leiomyoma in the English literature. Leiomyoma is normally a benign smooth muscle tumor and behaves as a hormone sensitive tumor. Leiomyomas develop during the reproductive age and regress after menopause<sup>(1)</sup>. Previous reports have shown that many clinical presentations of vaginal leiomyomas, the vaginal mass was the most common presentation of vaginal leiomyoma<sup>(2-8)</sup>. The labial majora is a rare site for a leiomyoma. The authors present a case of left labia majora leiomyoma that presented like a Bartholin's cyst.

## Case Report

A 25-year-old single woman came to the authors' gynecologic outpatient clinic with a left labial mass for 2 months. She had mild tenderness over the region of the left labia 2 weeks ago. This mass was swelling and larger than usual. There was no history of sexually transmitted disease. She had a regular menstrual period and the last menstrual period

was 3 weeks ago. Physical examination revealed a healthy woman, other physical examinations were uneventfully. There was a swelling mass located at the 4 o'clock region of labia majora. The skin over this mass was smooth. This mass was 3 cm in diameter, of rubbery consistency and no tenderness. On pelvic examination, the authors found that bulging of rubbery mass protruded through vaginal canal. The vagina and cervix appeared normal. The uterus was of normal size and mid position. Both adnexae were free and not tender.

A clinical diagnosis was a left Bartholin's cyst. The planning of management was marsupialization. Incision was located at the inner site of the left labia majora after local anesthetic application. The authors found a firm mass, 4 cm in diameter, complete excision of mass was performed, and the tumor mass was examined by a pathologist. The gross appearance was smooth surface, whitish, firm consistency mass. Postoperatively, the patient recovered uneventfully. The histological report confirmed a leiomyoma.

## Discussion

The leiomyoma is a benign neoplasm that arises from the smooth muscle and is common in the myometrial layer of the uterus<sup>(1)</sup>. It is hypothesized that uterine leiomyomas originate from somatic mutations in myometrial cells, resulting in progressive loss of growth regulation<sup>(9,10)</sup>. A leiomyoma is associated

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Correspondence to : Pitukkijronnakorn S, Department of Obstetrics & Gynaecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok 10400, Thailand.

with hormone sensitivity of the tumor, so that it develops during the reproductive (hormonally active) years and regresses after menopause<sup>(1)</sup>. In the presented case, the patient palpated a left labial mass during the reproductive age. In the previous literature over 10 years, there were multiple sites of leiomyoma outside the uterus eg. vagina, oral mucosa or mandible vascular leiomyoma<sup>(2-8)</sup>, there was no report of a labial leiomyoma in the English literature. The authors report a labial leiomyoma which presented like a Bartholin's cyst. Most leiomyomas in the outer uterus are not diagnosed clinically but only on histological examination. Previous reports show that there are many clinical presentations of vaginal leiomyomas and the vaginal mass was the most common presentation of vaginal leiomyoma<sup>(3,5)</sup>. Patients may primarily be asymptomatic in the early stage and then be symptomatic from growth of the tumor mainly due to compression such as urinary bladder outlet obstruction, pelvic pain and cystitis cystica<sup>(4)</sup>. Vaginal leiomyomas are usually localized and vary from solid to cystic consistency. In the presented case, the patient had clinical presentation with a slow growing left labial rubbery mass with mild tenderness. In the present case, the first diagnosis was Bartholin's cyst and designed to do marsupialization. The surgical procedure was changed to completed excision. The histologic examination revealed a leiomyoma.

The labia majora is composed of skin, subcutaneous tissue and blood vessels. From this basic knowledge, the authors found only the blood vessels had smooth muscle cells. The possibility of a leiomyoma in this case should originate from smooth muscle in blood vessels otherwise derived from stem cell at embryonal stage.

Regarding the uncommon site of a leiomyoma and clinical diagnosis is difficult in such a case. Therefore, the definite diagnosis of this condition should be confirmed by histologic examination. Surgical excision is the most appropriate treatment. However, patients who present with a labial mass like Bartholin's cyst, lipoma, fibroma and leiomyoma should not be excluded.

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### รายงานผู้ป่วยที่มีเนื้องอกของกล้ามเนื้อเรียบบริเวณแคมใหญ่

สมศรี พิทักษ์จิระณกร, ไพศาล ลีละชัยกุล, อภิชาติ จิตต์เจริญ

ส่วนใหญ่ภาวะเนื้องอกกล้ามเนื้อเรียบจะพบได้บ่อยที่บริเวณชั้นกล้ามเนื้อของมดลูกไม่ค่อยพบที่บริเวณอวัยวะอื่น ๆ ในอวัยวะสืบพันธุ์ของสตรี แต่ก็มีกรรายงานพบบริเวณช่องคลอดหรือบริเวณเส้นเลือดภายในช่องปาก แต่ยังไม่เคยมีการรายงานพบบริเวณอวัยวะสืบพันธุ์ภายนอก เนื้องอกกล้ามเนื้อเรียบนี้มีความสัมพันธ์กับระดับฮอร์โมนเพศ โดยจะพบว่าในผู้ป่วยส่วนใหญ่พบก่อนโตขึ้นในช่วงวัยเจริญพันธุ์ และจะค่อย ๆ ลดขนาดลงเมื่อเข้าสู่วัยหมดประจำเดือน รายงานนี้ได้นำเสนอผู้ป่วยหญิงไทยโสดอายุ 25 ปี ที่มีเนื้องอกบริเวณแคมใหญ่ ดูลักษณะภายนอกคล้ายถุงน้ำของต่อมบาร์โทลิน ซึ่งในผู้ป่วยรายนี้ได้รับการรักษาโดยการผ่าตัดเลาะเอาก้อนเนื้องอกออก และให้การวินิจฉัยเป็นก้อนเนื้องอกของกล้ามเนื้อเรียบที่บริเวณแคมใหญ่จากผลการตรวจทางพยาธิวิทยา