



## **Etiology of the Vaginal, Cervical, and Uterine Laceration on Avicenna Viewpoints**

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### **Dear Editor-in-Chief**

Cervical laceration has been identified as a known cause of postpartum hemorrhage. A review of existing literature obtains little information on the incidence and risk factors for cervical laceration after vaginal delivery (1). In the Iranian Traditional Medicine, all types of vaginal, cervical and uterine lacerations named as a common term of uterine fissure or "sheghaghe rahem". In this field of medicine, "sheghaghe" (fissure) referred to laceration and "rahem" is intended to uterus, cervix and vagina (2). In modern medicine, some risk factors have been identified for cervical laceration including gestational diabetes, shoulder dystocia, delivery with forceps, vacuum or both, history of cerclage, cervical conization, as well as dilation and evacuations (1).

Avicenna ("son of Sina"; c. 980 – June 1037) was one of the most prominent practitioners of traditional medicine in Iran. He mainly believed to underlying and environmental etiologies for laceration. He believes that the stiffness and dryness of the tissue is an underlying cause of the occurrence of lacerations and fissures. In such circumstances, with adding some environmental factors, such as difficult labor, the appearance of laceration is more predictable (3). In more explaining, based on the teachings of Iranian Traditional Medicine, four qualities of warmth, cold, moisture and dryness

should be presented proportionately in all body's materials and cells. Each of these qualities has special properties so that dominance of moisture results in structuring the new shape and losing current shape of material. In contrast, dryness can cause difficulty in accepting the new situation and losing previous situation (2). In terms of delivery, there is a need for dilation and tissue plasticity and thus dryness dominance can disrupt this condition leading some complications such as laceration (3). Iranian traditional medicine offers a wide variety of recommendations for removing dryness of soft tissues that can help to facilitate delivery and reduce its-related complications. For instance, Avicenna recommended using frequent bath and seat bath close to delivery (3). Today, the beneficial effects of same similar protocols such as water birth have been also well proven. It is noteworthy that the most prominent benefit of water birth in recent studies has been expressed to be reducing perineal trauma and need to episiotomy (4, 5). Avicenna also recommended anointing areas of pubis, waist and perineum with some types of oils such as chamomile and dill (3). Another introduced protocol in traditional medicine for softening tissues and removing their dryness is *Dlke laien* (soft massage) that is believed in traditional medicine to be effective for absorption of loosening

moisture to the tissues and also for tissue freshness. This type of massage is employed by applying mildness pressure by masseur (6). Nowadays, the beneficial effect of perineal massage on improvement of perineal outcome (defined as the presence or absence of injury to tissues in the perineal region, including the perineal body, anterior vaginal structures, and vaginal canal) is successfully confirmed (7-9). This positive effect can be potentially observable in antepartum massage referred to regular massage of the perineal body and lower vagina in the last month of pregnancy. Perineal massage is commonly done with an oil or lubricant. It is believed that the beneficial effects of this type of massage may be related to improved elasticity of vaginal tissues, increased blood flow and improved tissue perineal relaxation (10).

By studying the principles of traditional medicine, it can be opened up a new prospect for understanding etiologies and risk factors for perineal trauma and laceration within labor. It can be resulted in the acquisition of new and effective ways to prevent unpleasant complications of difficult labor such as laceration and bleeding.

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