



Review Article

Cervical Polypectomy during Pregnancy: The Gynaecological Perspective

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Abstract

The finding of a cervical polyp during pregnancy is uncommon condition. In some cases a polyp can be symptomatic, in others it is an incidental finding during vaginal examination. However in both situations it can be a cause of major anxiety for the pregnant woman. The management depends on the symptoms. Most of the time, the conservative approach is the management of choice. In this article we have tried to review the recent evidence and propose a management algorithm that can be used as a guide to explain to the patient the treatment options available and the rationale behind them.

Keywords

Cervical polyp; Polypectomy; Pregnancy; Complications in pregnancy; Malignancy

Introduction

In gynaecological outpatient clinics it is not uncommon to find a cervical polyp. For the vast majority these cervical polyps are benign [1]. Some patients may be symptomatic whilst in others the finding is incidental. They can range from small polyps on the cervix to large pediculated ones that can protrude through the introitus [2,3].

Irrespective of the size, the presence of a symptomatic polyp can be a cause of great anxiety for the pregnant patient. The management depends on the symptoms, if any, and the clinical assessment of the polyp.

In pregnancy the conservative approach is generally the preferred management option for small asymptomatic polyps. However there have been no published reviews that examine the treatment during pregnancy and obstetrical outcome. In this paper we review the recent evidence about management of cervical polyp during pregnancy and we propose a management algorithm (Figure 1) which can be used to explain treatment options to the patient.

Clinical Presentation of a Polyp During Pregnancy

Cervical polyps can be found in pregnant women, irrespective of their gestational age. At present the exact prevalence in the pregnant population is unknown.

Most of the time, the polyps are only found during vaginal examination. In countries such in UK, the vaginal examination is

not routinely performed during the booking visit of the pregnancy, in contrast to other European countries such as in Greece or France where a routine vaginal examination is performed at the beginning of any pregnancy.

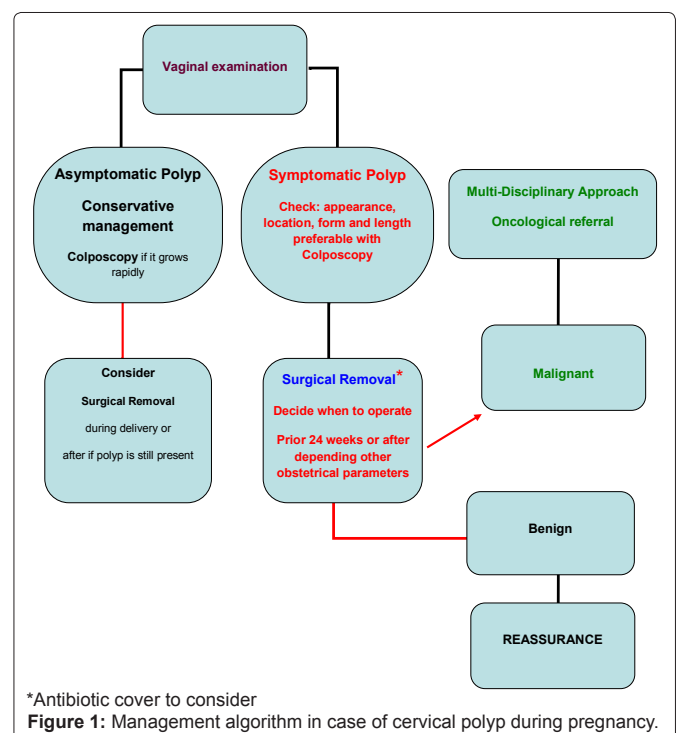
Therefore, it is difficult to establish whether a cervical polyp is a pre-existing condition or one that has developed during pregnancy. There is no uniform universal classification for cervical polyps and many times the finding of a polyp is not documented in the patient notes as it is considered benign or clinically insignificant making a retrospective audit on clinical notes extremely difficult.

Symptomatic women may present with vaginal bleeding, post coital bleeding, vaginal discharge, cervical infection or even with symptoms mimicking threatened preterm labour [4-6]. The degree of symptoms is not related to the length or the volume of the polyp.

An asymptomatic polyp can be occasionally diagnosed at vaginal examination during labour assessment [3]. These polyps do not generally interfere with the progress of labour and delivery. There have been case reports in the past of polyps being expelled spontaneously or disappearing after delivery [3] in the post partum period which makes the option of conservative management a feasible option in women who are asymptomatic and where the polyp appears benign in nature. If the polyp remains intact at the time of delivery the obstetrician may consider either removing it or following up the patient.

Addressing Patient Concerns

The finding of a cervical polyp may cause anxiety for the pregnant patient and her family irrespective of the size of the polyp hence the need for proper counselling and treatment. The commonest issues of



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concern are the risk of malignancy and the potential for antepartum and intrapartum complications. Symptomatic polyps are more likely to provoke further stress and fear in the pregnant women.

Nature of Polyps

In the general population most cervical polyps are benign in nature with a malignancy risk estimated from 0 to 1, 7 % [1,7]. A few cases of malignant cervical polyps have been described [8,9]. In pregnancy the risk of malignancy is unknown and sparse reports have described rare forms of cancerous polyps [10-13].

The benign polyps usually appear red to reddish-purple and are often pediculated. Most polyps are usually small in size, less than 2 cm long, however larger ones (> 4 cm) have been reported (Figure 2) in pregnancy [2,3] and in non pregnant women [14-21].

The aetiology of cervical polyps is not well understood. Most polyps are idiopathic. Cervical polyps can occur alone or in groups. They may be associated with chronic inflammation, or local congestion of cervical blood vessels. Metaplasia [15] and precancerous changes have been described with inflamed polyps for non pregnant women. The triggering factor for such change is unknown.

Diagnosis

Vaginal examination will detect the presence of a cervical polyp in most cases. The appearance, the form and the length of the cervical polyp can be evaluated during this examination and other obstetrical or vaginal causes of symptoms should be excluded. Colposcopic examination and polypectomy should be offered on clinical grounds following local guidelines and is recommended in symptomatic cases irrespectively the history of previous cervical screening.

Management

A literature review in OVID, Pub Med and Medline, Cochrane data bases was done using the key words pregnancy, cervical polyp, polypectomy, complication of pregnancy which revealed a few case reports but no clinical reviews during the last 20 years. Only one clinical review (author's publication in Internet Journal of Obstetrics and Gynaecology [2] was published in 2005 regarding this topic. The aim of this recent article is to review the current evidence and present an algorithm for management of cervical polyps in pregnancy (Figure 1).

The management depends on various factors such as the type of polyp (isolated, pediculated), circumstances of its diagnosis,

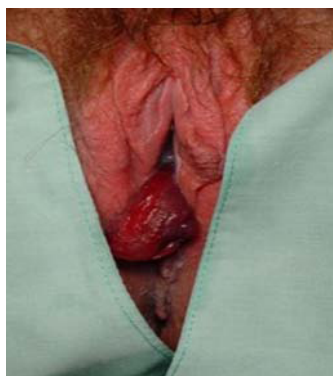


Figure 2: Pediculated cervical polyp protruding out of the introitus in a 21 weeks pregnant patient.

symptoms, coexisting risk factor of obstetrical complications and gestational age.

Asymptomatic Polyps

If the polyp is small and asymptomatic conservative management is the management of choice.

Any suspicious looking asymptomatic polyp or sudden change in appearance should prompt a colposcopic examination to determine if a surgical removal is necessary. Rarely cervical polyps are large enough to protrude out of the introitus (Figure 2) causing discomfort during walking in these extremely rare cases polypectomy should be undertaken.

It is uncertain whether the presence of cervical polyps alters the cervical matrix in any way. Limited data suggest that presence of polyps on the cervix in pregnancy may modify the consistency and enzyme properties of the cervix [22,23]. A study measured the granulocyte elastase activity in cervical mucus and showed significant difference between pregnant women with polyps and those without. From this research the authors concluded that polyps could encourage inflammation and may increase the risk of local infection or even chorioamnionitis [22]. They therefore suggested that polypectomy should be performed irrespectively of symptoms. We did not find any published report of premature labour due to co-existent cervical polyp. Further research is needed before the above recommendations can be accepted as standard practice.

Symptomatic Polyps

If the cervical polyp is symptomatic (for example with intermittent vaginal bleeding or vaginal discharge), the obstetric team needs to assess whether these symptoms are pregnancy related or originating from the cervical polyp. If the cervical polyp seems to provoke these symptoms a polypectomy with antibiotic cover would be the treatment of choice. A polypectomy can be done under local or spinal anaesthesia. Antibiotic cover should include coverage for both aerobic and anaerobic organisms such as Augmentin®.

There are multiple reasons for vaginal bleeding in pregnancy and this pose a challenge to the treating gynaecologist -obstetrician. It is sometimes difficult to distinguish whether the bleeding is exclusively due to the polyp or due to other uterine or placental factors. Conditions such as a threatened miscarriage, placental hematoma, abruption, or placenta previa which can coexist with the cervical polyp(s). Cervical polyps can often present in pregnancy imitate other conditions such as an inevitable miscarriage [4,6]. In early pregnancy expulsion of decidualised polyps was described in association with uterine malformations [5,24]. Transvaginal ultrasound scan and Doppler could help in distinguishing cervical polyps and intracervical or intrauterine causes of symptoms [25].

The ideal time to undertake a polypectomy depends on the gestational age. If the risk of premature labour is high one should delay surgical intervention and polypectomy. In these cases a multidisciplinary approach is suggested between gynaecologists, obstetricians and paediatricians.

Polypectomy

In non pregnant women a polyp forceps can be used to grasp the base of the polyp stem and the polyp is removed with twisting motion. The same method cannot be recommended during pregnancy as the polyp base can bleed significantly due to the increased blood supply.

In such cases diathermy of the site can be used with the necessary settings to ensure good haemostasis.

A polyp can be removed by tying a surgical ligature around the base and cutting it as is practised for non pregnant women. Excision of the polyp is done by electrosurgery. Because polyps may be infected, a short course of prophylactic antibiotics (5-7 days) should be administered after polypectomy. Once removed, polyps do not tend to recur on the same site.

In symptomatic women whose symptoms were attributed exclusively to the polyp, there is no observational study to our knowledge that reports pregnancy outcome after cervical polypectomy.

Patients who have been diagnosed with cancer (whether localised within the polyp or involving the wider cervix) will need a multidisciplinary approach for further management depending upon the type and stage of cancer found.

Oncological and obstetrical multidisciplinary teams should be urgently be involved in order to determine when to deliver the baby, the need for additional imaging such as MRI and the oncological surgical following delivery.

Patient counselling is essential prior to any management decision. We propose our algorithm (Figure 1) that can help with this task. It summarises the above management options and can be used as an additional document to assist with gaining informed consent from patients.

Conclusion

A Cervical polyp is an uncommon finding in pregnant women. There is limited data as to their effects on the cervical matrix. The evidence regarding their relationship to complications in pregnancy and labour is limited. Most polyps are asymptomatic and are an incidental finding on clinical examination. Based upon the available empirical evidence it can be concluded that these polyps do not cause problems in labour and delivery.

Despite the benign nature of the cervical polyps during pregnancy, a careful examination is mandatory to exclude malignancy and prompt polypectomy should be offered to symptomatic women or in cases of suspicious looking polyps. Further research and study is required to determine the exact prevalence of polyps in pregnancy and to determine the risk of malignancy in these cases.

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