for women for whom methotrexate or potassium chloride injection is unsuccessful [4].

The present case indicates the importance of imaging methods in confirming the location of a heterotopic cesarean scar pregnancy associated with an LNG-IUD.

Conflict of interest

The authors have no conflicts of interest.

References


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Prevalence of physical activity among healthy pregnant women in Ireland

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Regular exercise is promoted for its overall health and obstetric benefits. Both the American College of Obstetricians and Gynecologists (ACOG) and the Royal College of Obstetricians and Gynaecologists (RCOG) recommend 30 minutes of daily moderate-intensity physical activity for pregnant women [1,2]. Literature regarding the levels of physical activity among pregnant women in the USA reports that only 15% of women exercise during pregnancy—a significantly lower proportion than the 45% quoted for the general population [3].

The present study was an assessment of levels of physical activity among a cohort of healthy women in Ireland who had no contraindications to exercise during pregnancy. Between February 17, 2009, and January 28, 2010, women between 10 and 18 weeks of pregnancy attending the National Maternity Hospital, Dublin, Ireland, were recruited at their first prenatal appointment. The women completed a questionnaire used in the 2007 SLÁN Survey of Lifestyles, Attitudes and Nutrition, which has been validated for use in an Irish adult population [4]. To reflect early pregnancy activity, all women completed the questionnaire while between 10 and 24 weeks of pregnancy. Questions were included on the amount of physical activity undertaken in a typical week, and exertion levels were classified as strenuous, moderate, or mild. The study was approved by the hospital Ethics Committee.

In total, 358 of the 376 women approached for the present study agreed to participate. The mean body mass index (calculated as weight in kilograms divided by the square of height in meters) of the study participants was 26.7 (range, 18.9–45.1) and the mean age was 29.7 years (range, 19–41 years) (Table 1). Only 77 (21.5%) women met the current ACOG/RCOG recommendations for exercise in pregnancy and 42 (11.7%) reported no physical activity at all. Overall, almost one-quarter of the women (86 [24.0%]) reported walking (including both brisk and easy paces) for more than 30 minutes on 5 or more occasions in an average week. In total, 28 (7.8%) women reported partaking in strenuous physical activity at least once in an average week.

The results of the present study confirm that only a small proportion of healthy women are meeting current recommendations for exercise in pregnancy. Moreover, they are consistent with previous results from the USA showing that the proportion of the general population who exercise is larger than that of women who exercise during pregnancy [3], indicating that women who exercise regularly outside of pregnancy curtail or cease physical activity prenatally. One possible explanation for this is the perception that exercise in pregnancy is potentially harmful—a belief that may be held by healthcare professionals in addition to pregnant women. This is illustrated by the 1985 ACOG Exercise During Pregnancy guideline [5], in which it is stated that “pregnant women should stringently limit the type, duration and intensity of their exercise to minimize both fetal and maternal risk.” Vigorous exercise during pregnancy has been linked to preterm birth and low birth weight, but moderate or mild exertion has not [6]. Reported benefits of exercise in pregnancy include a reduced risk of pre-eclampsia and gestational diabetes, less gestational weight gain, and fewer somatic complaints (including insomnia and low mood) [7]. Overall, the benefits of exercise in pregnancy outweigh the risks, and there are implications of a sedentary lifestyle for both pregnancy and later life. Pregnancy is no longer considered a period of confinement and may even present an opportunity for lifestyle modification, owing to the fact that most women are motivated to have healthy infants. Obstetricians, general practitioners, and other healthcare professionals should be informed about the benefits of physical activity in pregnancy and encouraged to educate women about them. Maternal weight and infant birth weight are increasing in many high-income countries. In addition to an increased risk of birth trauma, the implications of a high infant birth weight include an increased risk of childhood obesity, which is currently the most prevalent childhood disease [8]. Public health initiatives are required to encourage women to lead healthy active lifestyles both during and after pregnancy.

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Canada found that 49% of abortion providers selectively use MVA [3]. A survey of National Abortion Federation clinics in the USA and [2]. These findings have led to an increase in MVA use in high-resource settings; a survey of National Abortion Federation clinics in the USA and Canada found that 49% of abortion providers selectively use MVA [3].

Table 1

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, y</td>
<td>29.7 (19–41)</td>
</tr>
<tr>
<td>Weight, kg</td>
<td>73.5 (51.8–136.7)</td>
</tr>
<tr>
<td>Height, m</td>
<td>1.66 (1.47–1.87)</td>
</tr>
<tr>
<td>BMI</td>
<td>26.7 (18.9–45.1)</td>
</tr>
<tr>
<td>Smokers</td>
<td>16 (4.5)</td>
</tr>
</tbody>
</table>

Abbreviation: BMI, body mass index (calculated as weight in kilograms divided by the square of height in meters).

* Values are given as mean (range) or number (percentage).

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Benefits of manual vacuum aspiration for abortion

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Manual vacuum aspiration (MVA) was designed for use in low-resource settings and is associated with lower costs compared with electric vacuum aspiration (EVA) [1]. A systematic review of 10 trials comparing MVA with EVA found no statistically significant differences in complete abortion rates or participant satisfaction; in addition, less blood loss and less severe pain were reported for the MVA procedures [2]. These findings have led to an increase in MVA use in high-resource settings; a survey of National Abortion Federation clinics in the USA and Canada found that 49% of abortion providers selectively use MVA [3].

Most licensing bodies require that the tubing used for EVA be discarded after each use. This is based on international standards such those set by the Center for Disease Control in the Guideline for Disinfection and Sterilization in Healthcare Facilities [4], in which it is stated that “a reused single-use device will have to comply with the same regulatory requirements of the device when it was originally manufactured.” By contrast, MVA involves the use of a plastic reusable syringe (e.g. the Ipas EasyGrip cannula [Ipas, Chapel Hill, NC, USA]).

Manual vacuum aspiration has been used since 2008 at the Everywoman’s Health Centre, Vancouver, Canada—which is a free-standing urban abortion clinic—for all procedures involving women at less than 10 weeks (69 days) of pregnancy. Each set of tubing for EVA weighs 293 g. In 2009, 2255 MVA procedures were carried out at the center, resulting in 660 kg less plastic tubing being discarded. The Ipas syringes are reprocessed using accelerated hydrogen peroxide, so the by-products are water and oxygen only. Each syringe weighs 108 g. There are currently 15 syringes at the clinic, each of which lasts for approximately 3 years, resulting in around 0.5 kg of plastic syringes being discarded each year.

If EVA had been performed, the cost of the tubing discarded for the 2255 procedures undertaken in 2009 would have been Can$4,094 (with each set of tubing costing Can$6.25). The cost of the discarded MVA syringes was approximately Can$250 (5 syringes at Can$50 each) and the cost of the reprocessing solution was Can$510 (Can$10 per week for 51 weeks). The cost of reprocessing the syringes for each procedure—which involved taking the pieces apart, rinsing them, placing them in the reprocessing solution for 5 minutes, and drying and reassembling the unit—was Can$469 (Can$25 per hour × 5 minutes × 2255 syringes). As a result, the cost saving for using MVA instead of EVA for 1 year was Can$8636.

Manual vacuum aspiration is as effective as EVA for induced abortion and for completion of spontaneous abortion in early

References