question, we examine the coefficient associated with the interaction terms, which capture the difference in effect of exposure in the affected region compared with the unaffected region, for each month of exposure. We see that for the ‘All births’ sample, births exposed in month 3 of gestation have significantly lower gestational age in the affected than in the unaffected region (difference: \(-0.228\) weeks, \(P = 0.022\)).

When we compare these findings by sex of the pregnancy, we find a substantial decline in weeks of gestation for female pregnancies exposed to the earthquake in Month 3 and 2—the decline in weeks of gestation in the affected region compared with the unaffected region, for each month of exposure. We see that for the ‘All births’ sample, births exposed in month 3 of gestation have significantly lower gestational age in the affected than in the unaffected region (difference: \(0.022\) weeks). These effects are significant at the \(P < 0.081\) and \(P < 0.068\) levels, respectively. Even if this effect does not reach a conventional \(P < 0.05\) level, it is a relevant population-level effect. In fact, it is conventional in economics and other social sciences to use the \(P < 0.10\) level to report statistical significance (these cut-points are, of course, just useful conventions. There is nothing essential about a \(P < 0.05\) or a \(P < 0.10\) threshold). As in Torche and Kleinhaus (2012), the effect is much weaker for males (the strongest effect is significant only at the \(P < 0.13\) level).

In sum, the main findings for the effect of earthquake exposure on gestational age reported in Torche and Kleinhaus (2012) remain. Earthquake exposure early in the pregnancy has a negative effect on gestational age. This effect is sex specific; it is much stronger for female pregnancies. This effect is relevant because natural disasters, as well as other sources of acute stress are, unfortunately, prevalent around the world, and they may affect individual outcomes even if exposure occurs before birth.

We appreciate the opportunity to further test these findings and to contribute to an important methodological discussion.

**References**


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**Poor results after surgery for rectovaginal endometriosis can be related to uterine adenomyosis**

Sir,

The interesting paper by Mabrouk et al. (2012) suggests that it may be useful to reconsider the surgical strategy for bowel endometriosis, which may carry a high risk of major complications and, even after extensive bowel resection, may have no beneficial effect. The authors used extensive preoperative imaging, including transvaginal ultrasound (TVS) and magnetic resonance imaging (MRI), to diagnose colorectal endometriosis. However, in no case was the presence of uterine adenomyosis mentioned. Today, uterine adenomyosis is diagnosed by MRI or TVS and several authors have described the association with endometriosis (Brosens et al., 2011). In a prospective study Kessler et al. (2008) found that severe dysmenorrhea of long duration in patients with endometriosis is significantly related to uterine adenomyosis. Larsen et al. (2011) found a correlation between the severity of endometriosis and the degree of uterine adenomyosis and in a recent prospective study, Gonzalez et al. (2012) found in a correlation between uterine adenomyosis and deep endometriosis with poor prognosis, particularly endometriosis of the rectosigmoid. Parker et al. (2006) concluded that persistence of dysmenorrhea and non-menstrual pain after optimal endometriosis surgery may indicate adenomyosis.

It is therefore surprising that the authors, while reporting extensive imaging for the detection of bowel endometriosis, make no mention of the simultaneous presence of uterine adenomyosis. In our view it is no longer acceptable to operate on severe endometriosis without exploring the uterus by MRI or TVS to exclude the presence of uterine adenomyosis.

**References**


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Reply: Poor results after surgery for rectovaginal endometriosis can be related to uterine adenomyosis

Sir,

We appreciate our colleagues’ considerations regarding the need for preoperative investigation of simultaneous presence of adenomyosis in patients with severe endometriosis.

We agree that the presence of uterine adenomyosis can influence the post-operative improvement pattern of pain symptoms associated with endometriosis. We also agree that preoperative evaluation of concomitant adenomyosis should be included in the preoperative workup when endometriosis is clinically suspected, particularly in patients desiring a pregnancy.

However, in this study, our primary end-point was to evaluate the histopathological patterns of colorectal endometriosis and investigate the potential relationships between histological findings (satellite lesions, positive margins and vertical infiltration) and clinical data (the incidence of recurrence, quality of life and symptom improvement). We also tried to examine if satellite lesions could influence preoperative scores of the short form-36 health survey questionnaire and visual analogue score for pain symptoms (Mabrouk et al., 2012).

In the literature, there are different results concerning the influence of adenomyosis on post-operative symptoms after radical surgery for severe endometriosis.

In a recent review of literature, Brosens et al. (2012) remarked that these two pathological conditions are frequently associated and that they could be two phenotypes of a similar endomyometrial dysfunction syndrome.

Parker et al. (2006) showed that, following surgical excision of endometriosis, non-menstrual pelvic pain and dysmenorrhea were significantly more likely to persist with increasing junctional zone (JZ) thickness, suggesting adenomyosis.

Ferrero et al. (2009), in a prospective study including 50 women with bowel endometriosis with or without uterine adenomyosis, concluded that the presence of uterine adenomyosis may determine the post-operative persistence of dysmenorrhea at 6, 12 and 18 months’ follow-up.

Differently, Landi et al. (2008) in a retrospective study on 80 patients treated for endometriosis stated that dysmenorrhea and dyspareunia ameliorated after a 20-months follow-up regardless of the presence of adenomyosis. No significant differences in pain relief score among the two groups of patients with or without adenomyosis were observed.

In our study 18 of 47 patients (38%) at stage IV of endometriosis had concomitant adenomyosis at the time of surgery (JZ thickness of >12 m). In agreement with Landi et al. (2008), we did not demonstrate a statistically significant impact of the presence of adenomyosis on post-operative pain relief.

References


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Predicting ovarian aging: anti-Mullerian hormone

Sir,

In an otherwise perceptive and well-written article (Loh and Maheshwari, 2011), the authors state that ‘Despite being a good marker of ovarian response AMH fails to predict who will get pregnant’. While it is true that some studies have found this to be true, we (Blazar et al., 2011) and others (Eldar-Geva et al., 2005; Nelson...