Perinatal origin of endometriosis: a call for registration of neonatal uterine bleeding

Brosens Ivo (BE) [1], Benagiano Giuseppe (IT) [2]

Context. Endometriosis in the adolescent and young woman is a highly angiogenic disorder causing haemorrhagic peritoneal lesions, adhesions and typical ovarian endometriomas. Endometriomas occur as well in the premenarcheal adolescent girl and their size may vary between 1 and 10 cm.

Objective. To explain their occurrence, Sampson’s hypothesis that cyclic menstruation is a cause of endometriosis has been extended to include neonatal uterine bleeding (NUB), a physiological phenomenon that has been ignored by the modern scientific literature.

Results. According to an autopsy study by the Harvard pathologists Ober and Bernstein the endometrium shows in 5% of the newborn decidualisation and menstrual-like shedding. Clinical studies in Europe described NUB in circa 5% of the neonates. The early onset of endometriosis in adolescents and the delay in diagnosis explain the severity of the disease in young women. Unfortunately, there is no registration of the occurrence of NUB to screen women at risk of early onset endometriosis. NUB is rare in preterm neonates and epidemiologic data show that preterm birth is protective against endometriosis. On the other hand, small for gestation age increases the frequency of NUB and epidemiologic studies show that low birth weight is a high risk factor of endometriosis. In view of these data, clinical markers can be used when endometriosis is suspected in an adolescent by the presence of subjective symptoms, such as severe dysmenorrhea or chronic pelvic pain.

Conclusions. Clearly, prospective studies are needed, but such studies cannot be performed unless NUB, similar to other uterine bleedings, is registered in clinical notes.