

# Clinical case report: conservative treatment of nodular adenomyosis

## Abstract

This article describes a clinical case report of nodular adenomyosis first diagnosed in adolescent girl. It emphasizes the importance of early disease detection and correct choice of therapeutic approach factors, directly relating to the future reproductive health of an adolescent girl. This case describes an example of successful long-term conservative treatment of adenomyosis with dienogest (Visanne) treatment for over three years and subsequent realization of reproductive function by the patient.

**Keywords:** nodular adenomyosis, adolescence, visanne, deterioration, problem, endometriosis

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## Introduction

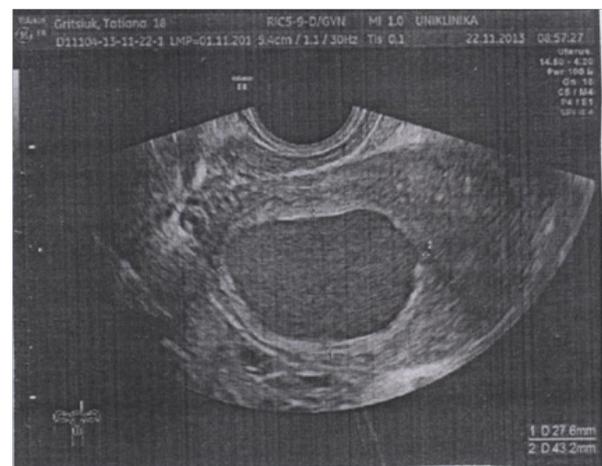
These days, the problem of endometriosis has become ever more relevant.<sup>1-3</sup> Environmental deterioration, increased emotional stress load in the society contribute to the formation of tension in the neuro humoral regulatory systems predisposing to the emergence of various hyper proliferative pathologies, including endometriosis.<sup>4-6</sup>

The problem of endometriosis has long ceased to be purely medical because it is associated with reduced quality of life of the women of reproductive age - the most socially important category.<sup>5,7</sup> Currently, endometriosis is no longer associated with reproductive age only as there is an increasing incidence of this condition being diagnosed in adolescence and at that time it accounts for 70% cases of chronic pelvic pain.<sup>2,3</sup> Numerous studies have proven that endometriosis may occur in adolescents girls.<sup>2,8,7</sup> The average age of disease onset is 15.9 years. Therefore, timely diagnosis of endometriosis and choice of adequate therapeutic approach are of particular importance in this patient population since they predetermine the possibility of successful reproductive performance of such women in the future.<sup>2,7,9</sup>

Having regard to the above, the case history of adenomyosis first diagnosed in adolescence deserves close attention. On June 6, 2013, patient M. aged 18 was admitted on an urgent basis to the gynecology department of Kyiv Municipal Hospital No.9. The patient presented with severe pain during menstruation, low-grade fever, nausea, vomiting. Referral diagnosis: nodular uterine leiomyoma with impaired nodular delivery. From the medical history of the patient: menstruation first started at the age of 13 and regular cycle was established within a year, periods were painful, sometimes leading to fainting. The patient also experienced loosed stool during the first days of periods. The patient repeatedly applied to pediatric gynecology department where she was diagnosed with the following: Dysmenorrhea. Adenomyosis? In 2011, she was examined by the gynecologist of the "Okhmatdyt" National Children's Specialized Hospital with subsequent pelvic ultrasound examination. Diagnosis: Nodular adenomyosis (72x68 mm; endometrial nodule was identified on the posterior uterine wall in the myometrium). The patient was prescribed 6 injections of Diphereline 3.62 mg. The reduction in the size of nodule to 31x29 mm has been observed under the course of the treatment. Diphereline was discontinued due to undesirable effects such as bone pain, hot flushes, fatigue, and tachycardia. Following

withdrawal of Diphereline, the periods resumed in 3 months and in 6 months menstrual pain developed again.

The data of patient's physical examination: the skin and visible mucous membranes are of pale pink color, the abdomen is soft, tender on palpation, participates in the process of breathing. Peritoneal signs are weakly positive in the lower abdomen. Pasternatsky's symptom is negative on both sides. Vaginal examination: uterus is enlarged as with 8-9 weeks pregnancy, round-shaped, dense, tender on palpation, cervical tractions are painless. Uterine appendages on both sides are not enlarged and painless on palpation. Ultrasound examination: uterus 69 x64x62mm. A hypoechoic mass is visible in the structure of myometrium on the posterior wall with hyperechoic dispersed particulate matter 50 x 46 x 43mm (Figure 1).



**Figure 1** Patient M. Nodular adenomyosis (June 2013).

Diagnosis: adenomyosis, nodular form. Secondary dysmenorrhea. Continuous treatment with Visanne over the period of 9 months has been recommended. The patient was examined in 9 months, in March 2014. The general state of health was assessed by the patient as satisfactory. Pain disappeared in as little as 3 months of treatment with Visanne. Findings of pelvic ultrasound: uterus 56x52x48mm. A hypoechoic mass is present in the structure of myometrium on the posterior wall with hyperechoic particulate matter 41x36x28mm (Figure 2).



Figure 2 Patient M. Nodular adenomyosis (March 2014).

Recommended: continued treatment with Visanne for one year.

In March 2015, the patient visited the clinic for follow-up examination. According to the patient, she decided to discontinue treatment with Visanne three months ago due to the prolonged complaint-free period. At the time of examination, the patient reported reoccurrence of painful menstruation in February 2015. The pelvic ultrasound has been performed. Findings: uterus 53×42.6×44mm. A hypoechoic mass is present in the structure of myometrium on the posterior wall with hyperechoic particulate matter 30×25.7×22.2mm–endometrioma. The patient was recommended to continue treatment with Visanne.

In January 2016 (in 11 months), the patient made follow-up visit. The general state of health was assessed by the patient as good. Findings of pelvic ultrasound: uterus 44×38×36mm. A hypoechoic mass is present in the structure of myometrium on the posterior wall with hyperechoic particulate matter 21×16.7×16.2mm (Figure 3). The patient was recommended to continue treatment with Visanne. In April 2017, as the patient got married and started unprotected sexual life, Visanne was discontinued and replaced by Epigalin (composition: 200 mg indol-3-carbinol-200, 82 mg green tea extract). There were no complaints expressed by the patient at the time of examination. Findings of ultrasound: uterus 46×39×38mm. A hypoechoic mass is presented in the structure of myometrium with hyperechoic particulate matter 29.0×20.7×18.9mm. The patient was recommended to continue treatment with Epigalin. In December 2017, the patient sought advice of gynecologist because of 14-days delay of menstruation. Ultrasound examination: uterus 56.2×50.8×49.4 mm. Gestational sac 16.6×16.1mm is visible in the uterine cavity. A hypoechoic mass is visible in the myometrium with hyperechoic particulate matter 18.1×11.1mm (Figure 4).

**Physician’s statement: pregnancy 4 weeks. Nodular adenomyosis**

The patient made scheduled visit on 02.02.2018. The general state of health was satisfactory. Normal course of pregnancy. Ultrasound findings: uterine body: 139.0×74.0×103.0 mm; 113.0×44.0×57.0 mm gestational sac is visible in the uterine cavity; cervix: 37.0 mm. Internal orifice of the uterus is closed; uterine walls: no abnormalities; uterine tonus: no abnormalities. Cervical canal: no abnormalities. Ultrasound report: Pregnancy 13 weeks+05 days Progressing (Figure 5).

On 09.03.2018, the patient underwent the second scheduled ultrasound. Conclusion: Pregnancy 18 weeks. Progressing (Figure 6).



Figure 3 Patient M. Nodular adenomyosis (January 2016).



Figure 4 Patient M. Pregnancy 4 weeks. Nodular adenomyosis (December 2017).



Figure 5 Patient M. Pregnancy 13 weeks Progressing.



Figure 6 Patient M. Follow-up ultrasound examinations at pregnancy week 18.

## Conclusion

Secondary dysmenorrhea with underlying endometriosis is a highly challenging issue in modern gynaecology. Unfortunately, statistical data demonstrate that this condition is often diagnosed in 6-7 years after the appearance of complaints. Considering the fact that endometriosis is diagnosed in 30%-40% of patients with primary infertility, the timely disease detection and correct choice of therapeutic approach are of vital importance since they are directly related to the future reproductive health of an adolescent girl. The nodular adenomyosis, even with large nodules, can be successfully treated conservatively with dienogest, and such long-term therapy (for over three years) is well-tolerated by the patients and contributes to the effective implementation of their reproductive function.

## Acknowledgments

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## Conflicts of interest

The author declares there no conflict of interest here.

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