

Early Diagnosis of Adolescent Endometriosis: Ultrasonography for Prevention of Delayed Diagnosis in Girls with Dysmenorrhea and Progression to Severity

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In adolescents it has been believed that dysmenorrhea is a symptom that every girl has to go through as the fundamental symptom that is inevitable prior to becoming a woman. The thought to incorporate in the prototype is that primary dysmenorrhea in the absence of any anatomic etiology is chiefly not a disorder having any physical connotations. These unwarranted belief systems are the basic reason why the diagnosis of endometriosis gets delayed in case of adolescents that are suffering from endometriosis. Furthermore, a diagnostic laparoscopy gets avoided in these young symptomatic girls that is believed to be the golden standard for arriving at a diagnosis of endometriosis in these adolescents for the apparently very common symptom of dysmenorrhea.

The requirement with regards to a non-surgical approach for establishment of diagnosis of endometriosis has further been augmented by the significant success that assisted reproductive technology (ART) manages to attain these days. With this the common strategy of utilization of ART initially on attempting to treat infertility that has made us just totally give up the exploring diagnostic laparoscopy as a customary infertility evaluation.

In spite of the considerable attractive action while trying to establish noninvasive biomarkers for endometriosis (like mRNA) these methods are in experimental stage as well as thus cannot be clinically accessed. Nevertheless, ultrasonography (USG) in addition to magnetic resonance imaging (MRI) have allowed considerable advances in the diagnosis of ovarian endometriomas along with deep infiltrating endometriosis. The attainment of these progression has been possible via systematic strategies that have evaluated the total probable endometriosis placements occurring commonly in the rectovaginal wall (noticeably with the utilization of the sliding sign), the uterosacral ligaments besides the colorectal wall [1].

Martire., *et al.* [2] documented a series of systematically carried out endocavitary USG (be it transvaginal/transrectal) in case of 270 adolescent girls who presented in succession amongst 12-20 yrs. Maximum significant observations amongst these USG's was that the indications for conducting these was for dysmenorrhea in just 10.4% of the subjects; however, once the histories of these patients were taken 54.4% of them reported a history of dysmenorrhea, hence that made dysmenorrhea the commonest symptom, this suggested that maximum of the adolescents believed that dysmenorrhea is an unavoidable part and parcel of menstruation which does not warrant a medical consultation, let alone an ultrasonography. Actually, the realization of dysmenorrhea as a significant symptom was highlighted just subsequent to deep probing. Hence as pointed by Martire., *et al.* [2], dysmenorrhea apparently is a good pointer of endometriosis [2], with dysmenorrhea in young girls be treated as a warning sign that makes it necessary for evaluation with the utilization of systematic USG. Moreover, dysmenorrhea should be specifically asked in view of the patients not realizing the significance of volunteering this knowledge or particularly ask for help with regards to this symptom.

Enough evidence is there now that ovarian blockade with the utilization of Oral contraceptives (OC) pill or Progestin only pill possess the capacity of reduction of propagation of endometriosis besides being of advantages in control of clinical symptoms that are inclusive of dysmenorrheal [3]. There is all the time a query that troubles the clinician if we make an early-stage diagnosis with the performance of surgical therapy that might cause avoidance of propagation of endometriosis, hence its need. This point has been debatable with regards to the natural course of endometriosis in adolescents. Certain researchers have documented that 33% of adolescents with endometriosis achieve natural resolution, whereas others hold the belief that endometriosis is a propagating disease that would undergo evolution towards a greater robust disease, that hence gives a justification towards early surgical intervention [4]. These patients might be presenting with certain systemic symptomatology like nausea, vomiting as well as diarrhea in addition to pelvic cramp, thus in the existence of these symptoms they should be considered as significant signs for the existence of endometriosis [4].

Furthermore, there has been altercation with regards to the utilization of OC's [4]. Actually, Chapron., *et al.* [5], documented the escalated utilization of OC amongst, the adolescent girls who had ultimately got the diagnosis of endometriosis stamped later. Nevertheless, this observation does not prove a causality as well as action association amongst utilization of OC amongst, the adolescent girls as well as the generation of endometriosis. Instead, this finding pointed that in women where dysmenorrhea manifestation was robust, that are the ones having the maximum probability of having endometriosis, were the patients who had maximum correlation with receiving a prescription of OCs for symptoms to be ameliorated. Thus, the team of Pirtea, DeZiegler, Ayobi believe that patients that, possess robust endometriosis have the requirement of either of OC's or Progestin only pill [3]. As far as they are concerned just the adolescent patients in possession of endometriosis that is refractory towards medical treatment are the ones where surgical evaluation is needed. In case of existence of ovarian lesions one needs to think of probable fertility preservation.

Thus, this work of Martire., *et al.* [2], demonstrated that USG experts' group in the context of endometriosis pointed that endometriosis can be confirmed in adolescent girls with the aid of USG. Moreover, their study further validated how association with dysmenorrhea can be illustrated by deep probing in the context of presence of dysmenorrhea on history of same, in view of them not thinking of them to be significant, that warrants a medical visit. Earlier we had reviewed the ACOG recommendations and role of medical therapy OC's, Gonadotropic releasing hormone against with add back therapy and debate on medical vs surgery [6]. The query of medical vs surgical therapy still keeps on being controversial [7].

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