Menstruation is the cyclic, orderly sloughing of the uterine lining by feedback loops of interactions of hormones of hypothalamo-pituitary-ovarian axis. It is the reflection of integrity of series of events that brings sexual maturation. Absence of menstruation in a pubertal girl whose friends already had it brings a great deal of tension, anxiety and worries among the parents which affect the emotional health of the adolescent girl. It also creates an impact on her developing sense of self, body image and sexuality which in turn can affect her self esteem and relationship with others. Clinicians need to deal such patients with a great deal of empathy.

According to World Health Organization (WHO) the median age of menarche is 13-16 years. However if by the age of 13 years, menstruation has not occurred, a work up for primary amenorrhoea should be started. Primary amenorrhoea can be defined as the complete absence of menstruation by the age of 14 years in absence of secondary sexual characteristics and by the age of 16 years in presence of it. Causes of primary amenorrhoea are varied and include a number of possibilities. The most common causes are gonadal dysgenesis, mullerian agenesis and hypogonadotropic hypogonadism. Mullerian agenesis has been found to be the most common cause in several studies in India and Thailand, which is different from western countries where gonadal dysgenesis is the commonest cause. This difference might be due to racial and environmental factors.

Diagnostic evaluation of the adolescent girls with primary amenorrhoea requires a sensitive, age appropriate approach. Clinicians need to consider the psychological age and emotional maturity of the patient. Before physical examination, the clinician should discuss with the adolescent about her problems with empathy. After careful preparation and with privacy, the physical and pelvic examination should be carried out which may often need examination under anesthesia.

Treatment of primary amenorrhoea is often diverse and complex and needs individualization. Ovulation induction with gonadotrophins or gonadotrophin releasing hormones for hypogonadotropic hypogonadism, various assisted reproductive techniques like surrogate mothers with patients own oocytes for mullerian agenesis may bring the dream true of becoming mother in such cases. Hormone replacement therapy in hypoestrogenic states can prevent debilitating osteoporosis & harmful cardiovascular diseases & should be started as early as possible. Sexual problems can appear as a hidden problems, which may lead to marital dysharmony. Clinicians should uncover this problem by asking leading questions & try to solve it by taking appropriate measures. Sometimes situation is best addressed by a multi disciplinary team including geneticist, medical endocrinologist, psychiatrist, reproductive surgeon and nutritionist. Psychosocial support and counseling for the patient and family is necessary to address the specific problem and provide guidance regarding anticipated sexual development.

In Bangladesh, no epidemiological studies on primary amenorrhoea has been carried out. Gynaecologists should come forward for such studies which will bring into light the burden of the problem in the society and also enlighten our understanding about the disease.

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