## UNILATERAL BREAST ENLARGEMENT IN A 7 YEARS GIRL : CASE REPORT

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Recently we found a girl of 7 years who came with her parents for ultrasonography (USG) of the enlarged left breast. No other problem was found in hepatobiliary, urogenital and adrenal regions, mammary skin texture was fairly uniform, highly reflective pattern typically seen in the young breast tissue; only a small layer of subcutancous fat and no significant retromammary fat was identified, the pectoral muscles stood out clearly in contrast to the strongly reflective breast tissue plate.

Longterm followup was advised and we like to report it as a rare case of isolated thelarche (IT).\* Cases of isolated thelarche are usually self-limiting, although 10% may progress to central precocious puberty (CPP).<sup>1</sup> In IT, breast development may be unilateral or bilateral and is not associated with development of the areola.<sup>2</sup> It usually occurs before 2 years of age, before the gonadotropin-estradiol negative feedback mechanism becomes sensitive. No other sign of pubertal progression e.g. height velocity, bone age acceleration and progressive development or appearance of other secondary sex characteristics, are observed. In girls with IT, uterine and ovarian volumes are similar to those of prepubertal girls.<sup>3-6</sup> Ovarian macrocysts (follicles measuring 10-20 mm in diameter) may be found in patients with IT.<sup>6-8</sup> Breast development may regress after several months, as happened in our case.

Unlike CPP, isolated the larche is not associated with maturation of the hypothalamicpituitary-gonadal axis.9

Timmerman believes that the best way forward in gynecologic is to produce a list of Recommended terms, procedures and definitions of end-points.<sup>10</sup>

(IT) = Isolated the larche\* = the beginning of breast development at the onset of puberty.

## REFERENCES

- Root AW. Precocious puberty. Pediatr Rev 2000; 21: 10-19.
- O'Dea LSL, Siegel SF, Lee PA. Pubertal disorders : precocious and delayed puberty. In ; Sanfilippo JSS, Muram D, Lee PA, Dewhurst J (eds). Pediatric and Adolescent Gynecology. Philadelphia, PA : WB Saunders Co ; 1994 : 53-76.
- Griffin IJ, Cole TJ, Duncan KA, Hollman AS, Donaldson MDC. Pelvic ultrasound findings in different forms of sexual precocity. Acta Paediatr 1995; 84: 544-549.

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- Haber HP, Wollman HA, Ranke MB. Pevic ultrasonography: early differentiation between isolated premature thelarche and central precocious puberty. Eur J Pediatr 1995; 154 : 182-186.
- Blogowska A. Significance of ultrasonographic examinations in diagnostics of premature and normal puberty in girls. Ann Acad Med stetin 1997; 43:161-180.
- Buzi F, Pilotta A, Dordoni D, Lombardi A, Zaglio S, Adlard P. Pelvic ultrasonography in normal girls and in girls with pubertal precocity. Acta Pediatr 1998; 87:1138-1145.
- Stanhope R, Abdulwahid NA, Adams J, Brook CGD. Studies of gonadotropin pulsatility and pelvic ultrasound examinations distinguish between isolated premature thelarche and central precocious puberty. Eur J Pediatr 1986; 145: 190-194.

- King LR, Siegel MJ, Solomon AL, Usefulness of ovarian volume and cysts in female isosexual precocious puberty. J Ultrasound Med 1993; 12: 577-581
- Herter LD, Golendziner E, flores JAM, Moretto M, Di Domenico K, Becker E Jr., Spritzer pm. Ovarian and uterine findings in pelvic sonography. Comparision between prepubertal girls, girls with isolated thelarche, and girls with central precocious puberty. J Ultrasound Med 2002; 21: 1237-1246.
- Timmerman D. Lack of standardization in gynecological ultrasonography. Ultrasound Obstet Gynecol 2000; 16: 395-398.