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Hormonal effect on gingiva: pubertal gingivitis

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DESCRIPTION

A 13-year-old female patient reported to the department with pain in the gums and bleeding from the gums during brushing. On examination, there was a solitary firm gingival enlargement between 11 and 12. Marginal gingiva of lower anterior teeth was severely inflamed and bleeding on probing was present (figure 1). Generalised gingivitis was present (figure 2). History was insignificant. No other systemic findings were significant. Age of the patient and insignificant systemic findings led to the diagnosis of pubertal gingivitis. Thorough oral prophylaxis was done. Periodic recall was done for oral hygiene reinforcement. Puberty occurs between the ages of 11 to 14 in most women. The production of sex hormones (oestrogen and progesterone) increases, then remains relatively constant during the remainder of the reproductive phase.¹ Kronman and Loesch² postulated that anaerobic organisms may use ovarian hormone as a substitute for vitamin K growth factor. During puberty, periodontal tissues may have an exaggerated response to local factors. A hyperplastic reaction of the gingiva may occur in areas where food debris, material alba, plaque and calculus are deposited. The inflamed

tissues becomes erythematous, lobulated and retractable.¹ During puberty, education of the parent or care giver is a part of successful periodontal therapy. Preventive care, including a vigorous program of oral hygiene, is also vital. Milder gingivitis cases respond well to scaling and root planning, with frequent oral hygiene reinforcement. Severe cases of gingivitis may require microbial culturing, antimicrobial mouthwashes and local site delivery or antibiotic therapy. Periodontal maintenance appointments may need to be more frequent when periodontal instability is noted.³

Competing interests None.

Patient consent Obtained.

REFERENCES

1. **Takei N**, Carranza K. Periodontal therapy in the female patient. In: *Clinical Periodontology*. Tenth Edition. Netherlands: Elsevier 2007:636–37.
2. **Kronman K**, Loseche JF. Direct interaction of estradiol and progesterone with *Bacteriodes melaninogenicus*. *J Dent Res* 1979;**58A**:10.
3. American Dental Association Health Foundation Research Institute, Department Of Toxicology. Antibiotic Interference with oral contraceptives. *J Am Dent Assoc* 1991;**122**:79.



Figure 1 Gingival enlargement between 11 and 12.



Figure 2 Generalised gingivitis.

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