Condyloma acuminatum associated with odontogenic myxoma: a case report

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Abstract Condylomata acuminatum is a sexually transmitted infectious disease caused by human papilloma virus on the skin. The transmission is mainly by close contact with infected person and autoinoculation. In oral cavity the condition manifests as soft pink nodules which proliferate and coalesce rapidly to form diffuse papillomatous clusters of varying size. Odontogenic myxoma is a rare tumor of jaws which occurs in the tooth-bearing areas of the mandible and maxilla. It is an uncommon, benign, but locally aggressive neoplasm. This case report highlights a 17-year-old girl with two lesions in oral cavity with soft tissue growth on the palate which has been diagnosed as Condyloma Acuminatum, treated by surgical excision and a large swelling on the right side of the mandible in the same patient diagnosed as odontogenic myxoma where marginal resection was performed.

Keywords Condyloma acuminatum · HPV-6 · Odontogenic myxoma · Palate · Young adult · Autoinoculation

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Introduction

Condyloma acuminatum is commonly known as genital warts. It is a symptom of a viral infection caused by human papilloma virus of retrovirus group. About 90% of the acuminate are related to human papilloma virus strains 6 and 11.

It is a benign epithelial proliferation that occurs most frequently on the mucous membranes of the perianal and genital areas of men and women [1]. These lesions manifest clinically as papillomatous warty growths in the throat, cervix, vagina, anus, and penis. From smaller size initially, they can multiply and spread to produce enormous, cauliflower-like masses in clusters. Although extra genital lesions do occur intra-oral condyloma acuminatum is rare. It affects the mucosa of the gingiva, cheeks, lips, and hard palate. It is predominantly seen in adults and rare in children.

Odontogenic myxoma is a rare tumor of jaws which occurs in the tooth-bearing areas of the mandible and maxilla. It is an uncommon, benign, but locally aggressive

neoplasm. It is believed to be from the mesenchymal portion of a tooth germ, most likely of the dental papilla. It has the potential for extensive bony destruction and extension into the surrounding structures [1]. Most cases are expansile and can displace and resorb teeth. Although this case presented with odontogenic myxoma in mandible and papillomatous growth on palate there is no association or correlation of this swelling with papillomatous growth.

Case report

A 17-year-old female patient reported to the department of Oral and Maxillofacial surgery with a non tender growth on the palate and a painless nontender large swelling on right side of mandible since 7 years (Figs. 1 and 2). Initially the growth on the palate and the swelling on right side of the mandible was peanut sized which gradual increased to the present size. The swelling in the mandible appeared one month later and she noticed a growth on the palate around the same time. The patient

gives a history of swelling on the mandible which was initially round in shape, in the premolar region on the lingual aspect and was gradually increasing in size to the present irregular shape extending from lower front teeth to right posterior teeth.

The patient's general health was normal and she did not mention any significant medical or dental history. There was no history of trauma, pain or any similar swellings on the body.

Clinical examination

Extra-oral examination

Facial asymmetry was evident on middle and lower 1/3rd on right side of the face. A diffuse single swelling approximately of size 6x3 cms extending anterioposteriorly from right corner of the mouth to anterior border of ramus and superior inferiorly from ala of nose to lower border of mandible (Figs. 1 and 2). The skin over the swelling was intact and was hard in consistency with no compressibility,

reducibility or tenderness. The lower border of mandible was irregular and she was having incompetent lips (Figs. 1 and 2). The right submandibular lymph nodes are palpable and tender.

Intra-oral examination

Palatal swelling

On inspection a single swelling was present on mid-palatal region of the palate approximately 4x3 cms in size with papillomatous clustered in appearance with well defined margins which is pink in color.

On palpation the initial findings were confirmed. A pedunculated growth with no raise in temperature, was firm in consistency with a negative trans-illumination test.

Mandibular lesion

On inspection a single swelling which was present on the lingual aspect on the right side of the mandible which was approximately 7x3 cms extending from right lower first incisor to right lower second molar with irregular shape and ill defined margins which was erythematous in colour was seen.

On palpation the findings were confirmed. The growth was solitary, with no local raise in temperature, hard in consistency and was for negative trans-illumination test. Buccal and lingual vestibular obliteration was evident on right side of mandible. Oral hygiene was fair. The occlusion is deranged with anterior open bite and right posterior cross bite.

Provisional diagnosis

Provisional diagnosis for the palatal swelling was papilloma. Differential diagnosis for the same was condyloma acuminatum, papilloma, giant condyloma acuminatum of buschke, squamous cell carcinoma.

Provisional diagnosis for the mandibular swelling was myxoma. Differential diagnosis for the same was odontogenic myxoma, odontogenic fibroma, ameloblastic fibroma, and ameloblastic fibrosarcoma.

Investigations

The patient had been referred to dermatology and gynecology department

Fig. 1 Frontal profile - preoperative

Fig. 2 Right lateral - preoperative

Fig. 3 Papillomatous growth of palate

Fig. 4 Hard swelling on lingual aspect of mandible

Fig. 5 Condyloma acuminatum - H&E stain section, 40x view showing haunted epithelial cells (Koilocytes)

Fig. 6 Odontogenic myxoma - H&E stain section, 40x view showing myxoid stroma with hypocellularity

Fig. 7 CT scan showing multilocular radiolucency

Fig. 8 OPG showing mixed radiolucent areas on right side

for thorough examination and no significant findings has been found and the VDRL, ELISA-HIV-I, and HIV-II tests were found to be negative.

Investigations such as incisional biopsy of the palatal growth revealed it as

condyloma acuminatum (Fig. 5) and of the mandibular lesion as odontogenic myxoma (Fig. 6) similarly radiographic investigations such as panoramic radiograph (Fig. 8) and computer tomography (Fig. 7) in relation to swelling

on posterior part of mandible revealed a multilocular radiolucency and expansion of cortical plates.

Surgical procedure

The surgical procedure was carried out with all aseptic measures under general anesthesia with complete excision of the soft tissue lesion of the palate (Fig. 9) and marginal resection of the mandible on the right side to excise the tumor mass keeping the lower border intact (Fig. 10).

The resected specimens were sent to histopathological examinations which were reconfirmed as condyloma acuminatum and odontogenic myxoma. Patient was advised antiviral drugs like podophilo (condylox) and 5-uracil cream to prevent recurrence along with regular antibiotic coverage. The follow up was done for every three months over a period of two years and the prognosis is fair.

Discussion

Condyloma acuminatum has been reported to affect the mucosa of the gingiva, cheeks, lips, and hard palate [1]. This is quite understandable as the oral cavity has a mucocutaneous junction similar to that of the vagina and anus. Most cases in children, however, have been associated with preceding or coexisting genital lesions in the affected individuals or with the presence of genital warts in their mothers during pregnancy [1,2]. Autoinoculation from such genital lesions or acquisition from infected mothers during delivery account for the interiorly lesions. In this case the mode of acquisition of the lesion remains an enigma. As there is no reported history of sexual contact and no other lesions were found other possible modes of transmission of this virus have to be considered. Evidence has suggested that skin and genital warts may be caused by different agents [11] and that skin warts appear to be acquired from environmental sources such as public bathing facilities [12] while genital warts are acquired sexually with peak occurrence early in the third decade of life [13].

Further studies are needed for the mode of transmission of papova viruses (human papilloma virus, HPV-6) especially in relation to warts. Meanwhile, non-sexual modes of transmission of this virus may be a real possibility especially when condylomata acuminata occur at extragenital sites [1].

Fig. 9 Complete excision of growth on palate

Fig. 10 Marginal resection of tumour mass from mandible

Fig. 11 Intraoral postoperative photograph

Fig. 12 Intraoral postoperative photograph

Fig. 13 Postoperative frontal view

Fig. 14 Postoperative OPG

Two independent lesions can often co-exists together and in our present case too it has been incidentally found that the lesion is associated with odontogenic myxoma a benign tumor of the mandible which is a rare entity of the oral cavity which makes more interesting as found in the same patient hence a proper and thorough case history with all routine investigations and specific tests for STDS like gonorrhea and syphilis should be carried out for proper diagnosis and management of the patient.

Conclusion

Oral condylomas are rare when compared to their dermatological counterpart. They also are rarer in children when a warty outgrowth is observed intra-orally these lesions also should be included under

differential diagnosis. A thorough clinical evaluation with proper investigations including those of venereal diseases should be carried out for effective diagnosis and management of these patients. A mandatory long-term postoperative follow-up (Figs. 11,12,13,14) is required to crosscheck recurrences of these lesions due to their fair prognosis.

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References

1. Ashiru JO, Ogunbanjo BO, Rotowa NA, Adeyemi-Doro FA, Osoba AO (1983) Intra-oral Condylomata acuminata. A case report. *Br J Vener Dis* 59(5): 325–326
2. Babich SB, Haber SD, Caviedes EY, Teplitsky P (2003) Condylomata acuminata in a boy. *J Am Dent Assoc* 134(3): 331–334
3. Eliane PD, Ana LF, Claudia CE (1997) Condyloma acuminatum: it's histopathological Pattern. *Sao Paulo Med J* 115(2): 1383–1389
4. Ergun SS, Kural YB, Buyukbabani N, Verim L, Akbulut H, Gurkan L (2003) Giant Condyloma acuminatum. *Dermatol Surg* 29(3): 300–303
5. Tominaga S, Fukushima K, Nishizaki K, Watanabe S, Masuda Y, Ogura H (1996) Presence of Human papillomavirus Type 6f in Tonsillar Condyloma Acuminatum and clinically Normal Tonsillar Mucosa. *Jpn J Clin Oncol* 26(6): 393–397
6. Infante-Cossio P, Gonzalo DH, Hernandez-Gutierrez J, Borrero-Martin JJ (2008) Oral inverted ductal papilloma associated with condyloma acuminata and HPV in an HIV+ patient. *Int J Oral Maxillofac Surg* 37(12): 1159–1161
7. Dezotti MS, Azevedo LR, Fontão FN, Capelozza AL, Sant'ana E (2006) Odontogenic Myxoma - A Case Report and Clinico-Radiographic Study of Seven Tumors. *J Contemp Dent Pract* 7(1): 117–1124
8. Davies SW (1965) Giant condyloma acuminata: Incidence among cases diagnosed as carcinoma of the penis. *J Clin Pathol* 18: 142–149
9. Henley JD, Summerlin DJ, Tomich CE (2004) Condyloma acuminatum and condyloma-like lesions of the oral cavity: a study of 11 cases with an intraductal component. *Histopathology* 44(3): 216–221
10. Sreetharan SS, Prepageran N (2002) Orbital Involvement Of Odontogenic Myxoma: a Case Report. *The Internet J Otorhinolaryngol* 11: 1
11. Wright RA, Judson FN (1978) Relative and seasonal incidences of the sexually transmitted diseases: a two-year statistical review. *Br J Vener Dis* 54(6): 433–440
12. Sexually transmitted diseases: extract from the annual report of the Chief medical officer of the department of health and social security for the year 1978. *Br J Vener Dis* 1980; 56(3):178–181
13. Doyle JL, Grodjesk JE, Manhold JH Jr (1968) Condyloma accuminata occurring in the oral cavity. *Oral Surg Oral Med Oral Pathol* 26(4): 436–440

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