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Oral Lesions Arising from Oral Sexual Practices and Their Management: A Narrative Review

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ABSTRACT :

Objective: To review the oral lesions that arise from oral sexual practices, both infectious and traumatic, and to summarise their diagnosis, management and prevention with particular attention to the role of the dental practitioner.

Methods: A narrative review was undertaken. Biomedical literature, case reports, systematic reviews and the current World Health Organization and Centers for Disease Control and Prevention guidelines on sexually transmitted infections (STIs) were identified through web-based searches and critically summarised.

Results: Oral sexual practices may produce two broad groups of oral lesions. Traumatic lesions, chiefly erythema, petechiae and ecchymosis of the soft palate associated with fellatio, are asymptomatic and typically resolve spontaneously within one to two weeks. Infectious lesions include syphilitic chancres, mucous plaques and ulcers; oropharyngeal gonorrhoea and chlamydia, which are frequently asymptomatic; herpes simplex virus lesions; and human papillomavirus (HPV)-related papillomas and warts. Oral HPV infection, particularly HPV-16, is strongly associated with oropharyngeal cancer, and the risk rises with the number of lifetime oral sex partners. Management depends on the cause: reassurance and follow-up for trauma, and guideline-based antimicrobial or antiviral therapy, partner notification and referral for infections. HPV vaccination is associated with a marked reduction in vaccine-type oral HPV prevalence. Barrier methods lower but do not eliminate risk, and condoms appear less effective against extragenital gonorrhoea.

Conclusion: Dental practitioners are well placed to recognise these lesions. A sensitive sexual history, a careful oropharyngeal examination, appropriate testing or referral and preventive counselling allow timely diagnosis, avoid unnecessary investigation of benign traumatic lesions and help interrupt onward transmission of infection.

Keywords: oral sex; oral lesions; sexually transmitted infections; human papillomavirus; syphilis; palatal petechiae

Introduction

Changes in sexual behaviour over recent decades have made oral transmission of traditional sexually transmissible infections (STIs) increasingly recognised [1]. Oral sex is common among both heterosexual and homosexual couples [2,3]. It has been implicated in the transmission of gonorrhoea, syphilis, *Chlamydia trachomatis* and chancroid [2], and, among viral infections, of human papillomavirus (HPV) and herpes simplex virus type 1 (HSV-1) [3].

The oral cavity is often the first site at which these infections declare themselves. Lesions are visible, may interfere with speech or swallowing, and the mouth can act as a reservoir for onward spread [1]. A recent systematic review of observational studies found that ulcers, plaques, papules and papillomatous lesions were directly linked to STIs, most often on the tongue, commissures and palate, and that periodontal disease, oral cancer, candidiasis and temporomandibular disorders were reported as associated conditions [4].

Oral sexual practices can also cause non-infectious injury. The best documented is fellatio-associated erythema, petechiae or ecchymosis of the palate [5,6]. Patients are often unaware of the cause, or reluctant to disclose their sexual history, so the clinician must be alert to the possibility [7]. Failing to recognise a benign traumatic lesion can lead to needless investigation, while missing an infectious lesion delays treatment and allows further transmission.

The objective of this review is to describe the oral lesions, infectious and traumatic, that arise from oral sexual practices, and to summarise their diagnosis, management and prevention, with emphasis on the role of the dental practitioner.

Materials and Methods

This is a narrative review. Literature was identified in October 2026 through web-based searches of indexed biomedical literature, including PubMed and PubMed Central, publisher and institutional repositories, and the current treatment guidelines of the World Health Organization (WHO) [8] and the Centers for Disease Control and Prevention (CDC) [9]. Search terms combined "oral sex", "orogenital", "fellatio", "oral manifestations", "sexually transmitted infections", "syphilis", "gonorrhoea", "chlamydia", "herpes simplex", "human papillomavirus" and "palatal petechiae".

English-language systematic reviews, narrative reviews, guidelines, observational studies and case reports describing oral or oropharyngeal lesions or infection linked to oral-genital or oral-anal contact were considered. No date limit was applied, but priority was given to publications of the last decade and to current guidelines. Findings were synthesised narratively. No formal quality appraisal or meta-analysis was performed.

Ethical approval and informed consent were not required because the review used only published literature and involved no human participants or patient data.

Results and Discussion

The literature describes two broad groups of oral lesions linked to oral sexual practices: traumatic lesions and infectious lesions. Table 1 summarises both. Each is considered in turn, followed by the diagnostic approach, management principles and prevention.

Traumatic lesions: fellatio-associated palatal injury

Fellatio-associated palatal lesions are the best-documented non-infectious oral injury from oral sexual practices [5–7]. They were first reported in the French literature by Barthélemy and in the English literature by Ronchese [7]. The proposed mechanism is direct, forceful contact of the glans penis with the palate together with negative pressure created by suction, which injures the mucosa and ruptures submucosal vessels [7].

The lesions are asymptomatic and typically lie on the soft palate, often near the midline, and usually spare the uvula [5]. They present as erythema, petechiae, ecchymosis, haemorrhage or purpura [5,7], appear within about two days of the trauma [7], and occur in men as well as women [10]. In a 2025 series of ten patients, nine women and one man, all STIs were excluded, no treatment was given and complete remission occurred within two weeks [11]. In another report the lesions had disappeared at a 14-day review [6]. Six weeks after one episode, tan-brown macules marked the sites of previous petechiae, representing resolving submucosal haemorrhage [5]. Recurrence follows new episodes of receptive oral sex [7], and coexisting oral candidiasis does not exclude a traumatic cause [5].

Management consists of a sensitive history, reassurance and an explanation that healing usually takes one to two weeks [7,11], with review at about two weeks [6]. No treatment is needed [11]. Lesions that persist, progress or lack a plausible history warrant further investigation, including haematological assessment and, where indicated, biopsy. Fellatio should be added to the differential diagnosis of intraoral petechiae [6], and STI testing should be considered because the two may coexist [7].

Syphilis

Syphilis is caused by *Treponema pallidum*, and oro-genital contact is an established route of transmission [2]. Oral involvement can occur at any stage. In a 12-year series of 85 patients whose acquired syphilis was diagnosed through oral lesions, the annual number of cases rose markedly over the last five years, most lesions were single ulcers or plaques, and the lips and tongue were the most affected sites [12]. Primary disease produces a chancre at the site of inoculation, and secondary disease produces mucous plaques and ulcers [12]. Because the appearance is heterogeneous and can mimic lichen planus, herpetic infection, traumatic ulcers or malignancy, the diagnosis is easily missed; oral lesions may be the only diagnostic clue and a high index of suspicion is needed [12].

Early syphilis is treated with a single intramuscular dose of benzathine penicillin G, 2.4 million units [9]. WHO likewise recommends benzathine penicillin, and its 2024 update added dual treponemal/non-treponemal rapid tests and self-testing as additional options for syphilis testing, together with recommendations on partner services [8].

Oropharyngeal gonorrhoea and chlamydia

Oropharyngeal gonorrhoea and chlamydia are common in men who have sex with men (MSM). Across 53 studies, median prevalence was 4.6% for oropharyngeal gonorrhoea (range 0.5–16.5%) and 1.7% for oropharyngeal chlamydia (range 0–3.6%) [13]. Oropharyngeal gonorrhoea can be transmitted by kissing as well as by condomless oral sex, so condoms may not prevent extragenital gonorrhoea; chlamydia, by contrast, is mainly transmitted by condomless penile–anal sex [13]. Both infections are often asymptomatic, so many pharyngeal and rectal infections go undetected [14].

Because visible oral signs are uncommon, dental practitioners will usually meet these infections through history and referral. Diagnosis rests on nucleic acid amplification testing of a pharyngeal swab [9]. For gonorrhoea, CDC recommends ceftriaxone 500 mg intramuscularly as a single dose, adding doxycycline 100 mg twice daily for 7 days when chlamydia has not been excluded [9]. WHO suggests doxycycline 100 mg twice daily for 7 days for uncomplicated chlamydial infection, including oropharyngeal infection, with azithromycin 1 g as a single dose when doxycycline is unavailable or adherence is a concern [8]. Resistance in gonorrhoea is a growing threat, and ceftriaxone is the last effective option in many countries [14]. Guideline

regimens and local resistance data must therefore be followed closely.

Herpes simplex virus

Insertive oro-genital contact is an important risk factor for acquisition of HSV-1 [3], and shedding without visible lesions may allow transmission when no sores are apparent [1]. Oral infection produces vesicles that ulcerate on the lips and intraoral mucosa, and the virus then persists and reactivates. Antiviral agents such as aciclovir, valaciclovir and famciclovir are the mainstay of treatment, and CDC gives aciclovir 400 mg three times daily for 7–10 days for a first genital episode [9]. Oral disease follows the same principles. Patients should avoid oral sex during the prodrome and while lesions are present.

Human papillomavirus and oropharyngeal cancer

Oral HPV infection can cause squamous papillomas, oral verrucae (common warts) and condylomata acuminata [1]. Of greater concern is its link with oropharyngeal squamous cell carcinoma. In a hospital-based case-control study of 100 patients with oropharyngeal cancer and 200 controls, oral HPV-16 infection carried an odds ratio (OR) of 14.6, and six or more lifetime oral sex partners was also associated with higher risk (OR 3.4). HPV-16 L1 seropositivity was strongly associated with cancer regardless of tobacco and alcohol use (OR 33.6, 95% CI 13.3–84.8, in those without heavy use) [15].

A Canadian case-control study found that starting oral sex at age 16 or younger was associated with oropharyngeal cancer compared with onset after age 30 (OR 2.98, 95% CI 1.37–6.47). The association weakened to OR 1.09 (95% CI 0.25–4.71) among HPV-positive participants, suggesting that oral HPV infection mediates the effect [16]. A meta-analysis of 36 studies reported that oral sex raised the probability of HPV infection 1.96-fold and that more than five oral sex partners increased the risk of oral cancer (OR 1.68), although oral sex practice as such did not differ significantly between patients and controls [17].

Most oral HPV infections clear and oropharyngeal cancer remains uncommon relative to the prevalence of infection. Vaccination is therefore an important preventive measure. In a US national survey, prevalence of oral HPV 16/18/6/11 infection was 0.11% in vaccinated and 1.61% in unvaccinated adults aged 18–33, an estimated 88.2% reduction, although low uptake limited the population-level effect to 17.0% overall [18]. A systematic review of nine studies with 48,777 participants found a mean relative prevention of 83.9% in cross-sectional studies and significant reductions in vaccine-type oral infection across study designs [19].

Evidence for treating oral HPV lesions comes mainly from case series and expert opinion. Solitary papillomas and warts are usually removed by conservative excision, laser ablation or cryotherapy, with histopathology to exclude dysplasia, and patients should be told that recurrence is possible. A thorough head and neck examination, including the tonsils and base of tongue, is advisable in patients with oral HPV disease.

Other infections

Oro-genital transmission of HIV is possible, but the risk is substantially lower than with vaginal or anal intercourse [3]. Hepatitis A and B can be transmitted by oro-anal contact [3]. *Neisseria meningitidis* and respiratory organisms such as streptococci and *Haemophilus influenzae* may also be transmitted orally, and cunnilingus appears to predispose to recurrent vaginal candidiasis [2].

Table 1. Oral lesions associated with oral sexual practices and their principal management

Condition	Agent or mechanism	Typical oral findings	Principal management
Fellatio-associated palatal lesions	Glans contact with the palate plus negative pressure [7]	Asymptomatic erythema, petechiae, ecchymosis or purpura of the soft palate [5,7]	Reassurance, history, review at about 2 weeks; spontaneous resolution [6,11]
Syphilis	<i>Treponema pallidum</i> [2]	Chancre, mucous plaques, ulcers; lips and tongue most affected [12]	Benzathine penicillin G intramuscularly [8,9]
Oropharyngeal gonorrhoea	<i>Neisseria gonorrhoeae</i> [13]	Often asymptomatic [14]	Ceftriaxone-based therapy; pharyngeal NAAT [8,9]
Oropharyngeal chlamydia	<i>Chlamydia trachomatis</i> [13]	Often asymptomatic [14]	Doxycycline 100 mg twice daily for 7 days [8,9]
Herpes simplex	HSV-1, less often HSV-2 [3]	Vesicles progressing to ulcers	Antivirals; avoid contact during lesions [9]
HPV-related lesions	HPV types, including HPV-16 [1,15]	Papillomas, verrucae, condylomata [1]	Excision or ablation; vaccination; oropharyngeal examination [15–19]

Diagnostic approach in the dental setting

A non-judgemental, confidential sexual history is the starting point, because patients may not know the cause of a lesion and may hesitate to disclose their practices [7]. The history should cover sexual practices, recent partners, condom use, symptoms and previous STIs. The examination should include

the lips, tongue, palate, floor of mouth, gingivae, tonsils, oropharynx and cervical lymph nodes.

Investigations follow the suspected cause. Syphilis is confirmed by serology [8], gonorrhoea and chlamydia by nucleic acid amplification testing of a pharyngeal swab [9], and herpes simplex by viral detection from a lesion swab. Persistent or atypical lesions need biopsy. A patient with one STI should be offered testing for others, including HIV. Because testing is rarely available in dental practice, prompt referral to a physician or sexual health clinic is appropriate, and interdisciplinary collaboration is central to early diagnosis and comprehensive management [4]. In many settings STI care follows a syndromic approach [20], so practitioners should know the national guidelines of their own country.

When an infection follows fellatio, both oral and genital lesions must be treated, because inadequately treated genital lesions are the more likely reason for persistent oral infection [7]. CDC advises that sexual partners from the preceding 60 days be referred for evaluation, testing and presumptive treatment [9]. Patients should avoid sexual contact until treatment is complete and symptoms have resolved.

Prevention and counselling

Barrier methods reduce but do not eliminate risk. Condoms may not prevent extragenital gonorrhoea, since kissing can also transmit it [13], and the evidence for dental dams during oral sex is limited. HPV vaccination substantially lowers vaccine-type oral HPV prevalence and should be encouraged for eligible age groups in both sexes [18,19]. Counselling should cover reducing the number of partners, regular STI testing and abstaining from oral sex during active lesions [9]. Smoking cessation is a worthwhile additional measure in patients with oral HPV infection.

Strengths and limitations

This review draws on current guidelines, systematic reviews and case reports, which gives clinicians a practical overview. It is a narrative review. The searches were web-based, no formal quality appraisal was performed, and relevant publications may have been missed. The evidence on traumatic lesions comes almost entirely from case reports and small series. Much of the evidence on oropharyngeal gonorrhoea and chlamydia comes from MSM populations and may not generalise to all groups. Treatment recommendations and resistance patterns change, so the current local guideline should be consulted before prescribing.

Conclusion

Oral sexual practices give rise to a spectrum of oral lesions, from benign traumatic palatal petechiae to infections that have serious consequences if missed: syphilis, gonorrhoea, chlamydia, herpes simplex and HPV-related disease, the last with an established link to oropharyngeal cancer. Traumatic lesions need only reassurance and review, whereas infectious lesions call for testing, guideline-based treatment, partner notification and referral. Dental practitioners are well placed to recognise these conditions if they take a sensitive history and examine the oropharynx carefully. Prevention rests on counselling, HPV vaccination and realistic advice about the limits of barrier methods. Prospective studies are needed on the natural history of traumatic palatal lesions and on how well dental settings can support STI screening and referral.

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Conflict of Interest

The author declares no financial, professional, institutional or personal conflict of interest.

REFERENCES

1. Queirós C, Costa JBD. Oral transmission of sexually transmissible infections: a narrative review. *Acta Med Port.* 2019;32(12):776-81. doi:10.20344/amp.12191
2. Edwards S, Carne C. Oral sex and transmission of non-viral STIs. *Sex Transm Infect.* 1998;74(2):95-100.
3. Edwards S, Carne C. Oral sex and the transmission of viral STIs. *Sex Transm Infect.* 1998;74(1):6-10.
4. González-Romero A, Pecci-Lloret MR, Guerrero-Gironés J. Oral findings in patients with sexually transmitted infections: diagnostic relevance and clinical implications. *J Am Dent Assoc.* 2026;157(5):521-31.e5. doi:10.1016/j.adaj.2025.11.011
5. Cohen PR. Fellatio-associated petechiae of the palate: report of purpuric palatal lesions developing after oral sex. *Dermatol Online J.* 2013;19(7):18963. doi:10.5070/D3197018963
6. Oliveira SC, Slot DE, Van der Weijden GA. What is the cause of palate lesions? A case report. *Int J Dent Hyg.* 2013;11(4):306-9. doi:10.1111/idh.12045
7. Shunmugavelu K, Paari S. Etiologic assessment of palatal petechiae – a case report. *GMS Hyg Infect Control.* 2024;19:Doc68. doi:10.3205/dgkh000523
8. World Health Organization. Updated recommendations for the treatment of *Neisseria gonorrhoeae*, *Chlamydia trachomatis* and *Treponema pallidum* (syphilis), and new recommendations on syphilis testing and partner services. Geneva: World Health Organization; 2024.
9. Workowski KA, Bachmann LH, Chan PA, et al. Sexually transmitted infections treatment guidelines, 2021. *MMWR Recomm Rep.* 2021;70(4):1-187. doi:10.15585/mmwr.r7004a1

10. Mendez LA, Martinez R, Rubio M. Fellatio-associated erythema of the soft palate: an incidental finding during a routine dental evaluation. *BMJ Case Rep.* 2018;2018:bcr2017221901.
11. Veraldi S, Ramoni S, Aromolo IF, Nazzaro G. Ten cases of erythematous-petechial lesions of the palate caused by fellatio, and a review of the literature. *Int J STD AIDS.* 2025;36(9):741-3. doi:10.1177/09564624251347474
12. Matias MDP, de Jesus AO, Resende RG, Caldeira PC, Aguiar MCF. Diagnosing acquired syphilis through oral lesions: the 12 year experience of an Oral Medicine Center. *Braz J Otorhinolaryngol.* 2020;86:358-63. doi:10.1016/j.bjorl.2018.12.010
13. Chow EPF, Fairley CK. The role of saliva in gonorrhoea and chlamydia transmission to extragenital sites among men who have sex with men: new insights into transmission. *J Int AIDS Soc.* 2019;22(Suppl 6):e25354. doi:10.1002/jia2.25354
14. World Health Organization. Guidelines for the management of asymptomatic sexually transmitted infections. Geneva: World Health Organization; 2024.
15. D'Souza G, Kreimer AR, Viscidi R, et al. Case-control study of human papillomavirus and oropharyngeal cancer. *N Engl J Med.* 2007;356(19):1944-56. doi:10.1056/NEJMoa065497
16. Laprise C, Madathil SA, Schlecht NF, et al. Increased risk of oropharyngeal cancers mediated by oral human papillomavirus infection: results from a Canadian study. *Head Neck.* 2019;41(3):678-85. doi:10.1002/hed.25436
17. Rodriguez-Archilla A, Suarez-Machado R. Influence of sexual habits on human papillomavirus infection risk and oral cancer. *Sci Dent J.* 2022;6. doi:10.4103/sdj.sdj_73_21
18. Chaturvedi AK, Graubard BI, Broutian T, et al. Effect of prophylactic human papillomavirus (HPV) vaccination on oral HPV infections among young adults in the United States. *J Clin Oncol.* 2018;36(3):262-7.
19. Nielsen KJ, Jakobsen KK, Jensen JS, et al. The effect of prophylactic HPV vaccines on oral and oropharyngeal HPV infection: a systematic review. *Viruses.* 2021;13(7):1339. doi:10.3390/v13071339
20. World Health Organization. Guidelines for the management of symptomatic sexually transmitted infections. Geneva: World Health Organization; 2021.