Danger signals in oral mucosal lesions

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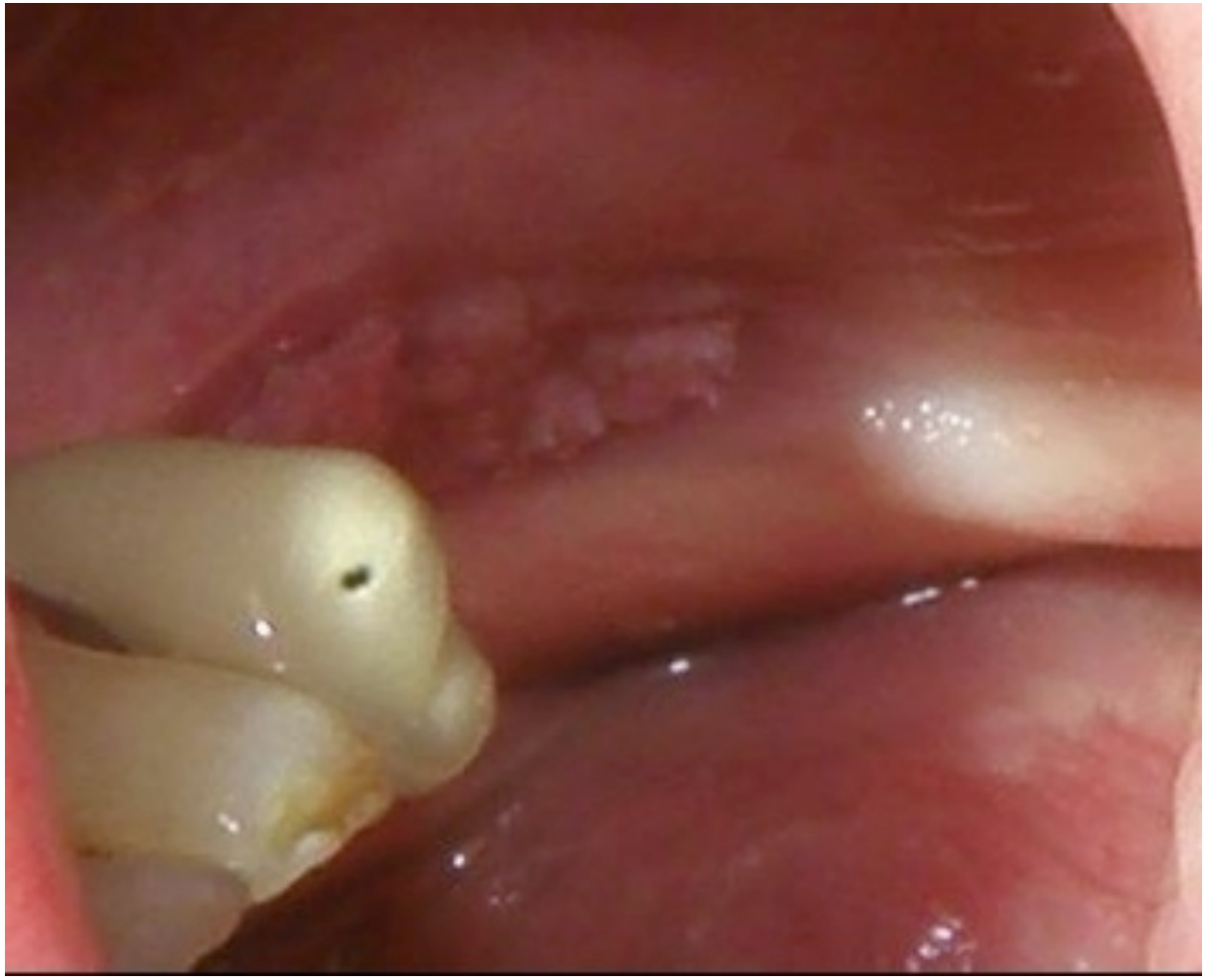
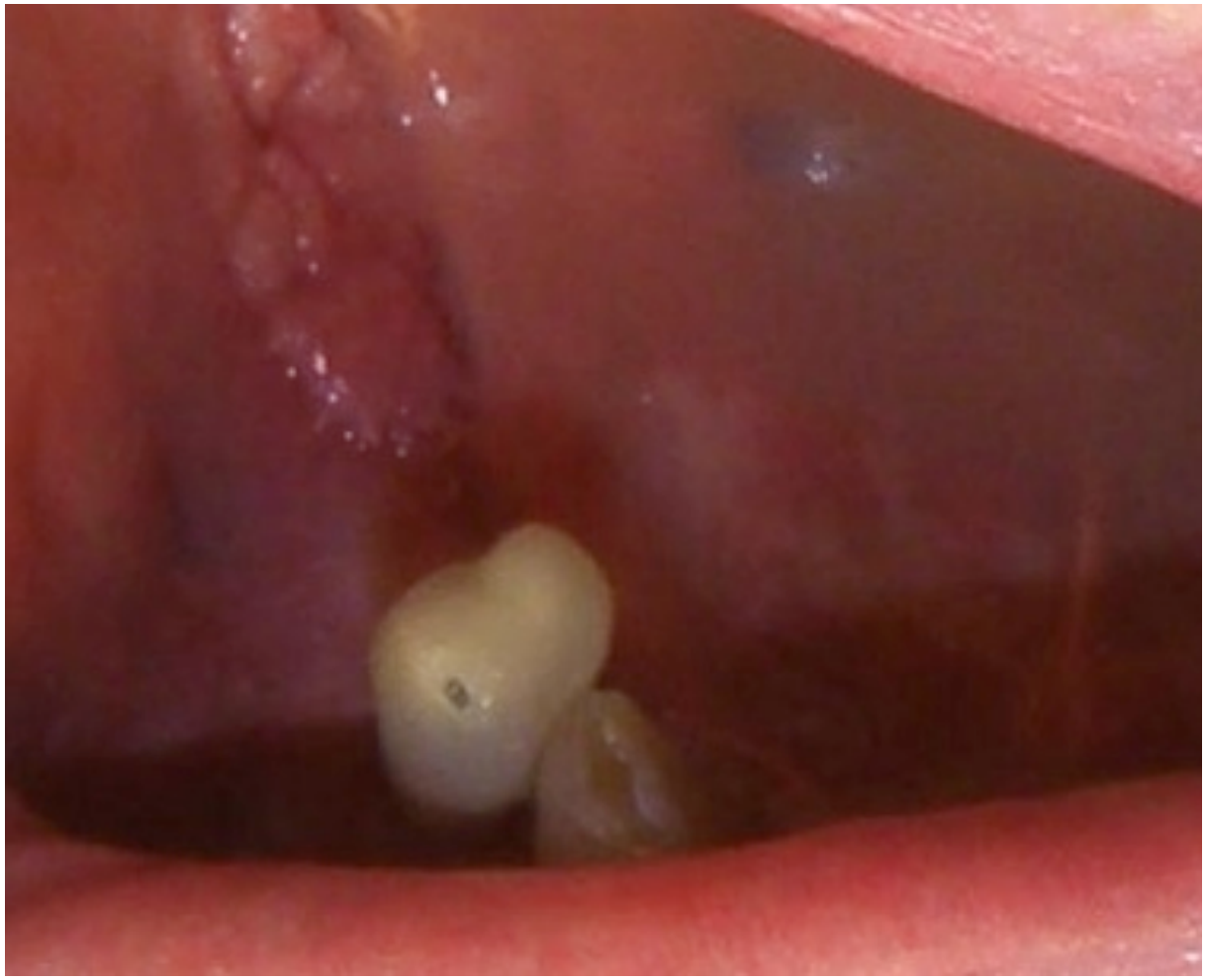
FOLKTANDVÅRDEN

VÄSTRA GÖTALANDSREGIONEN

Dangerous or not dangerous

Dangerous or not dangerous





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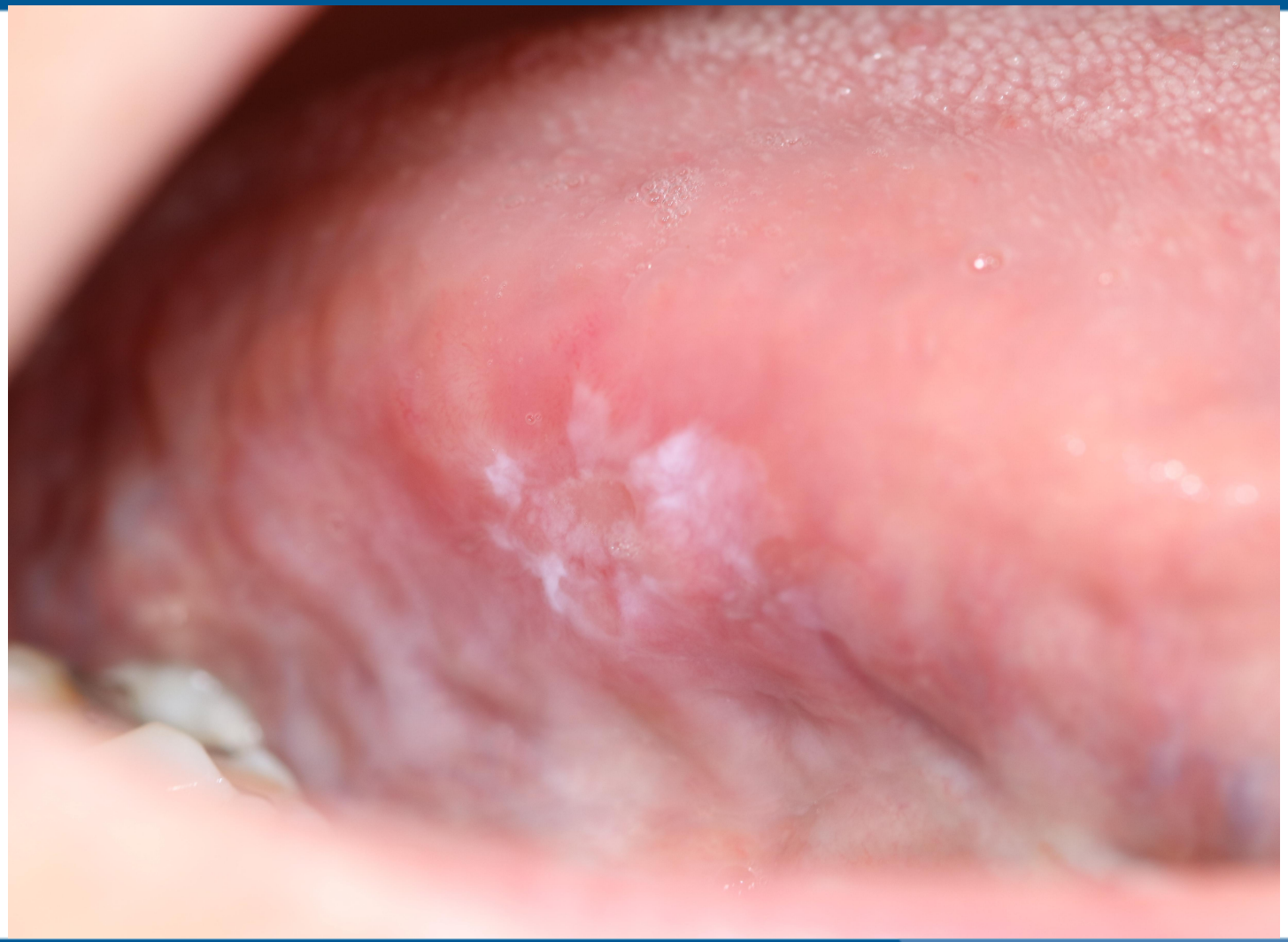

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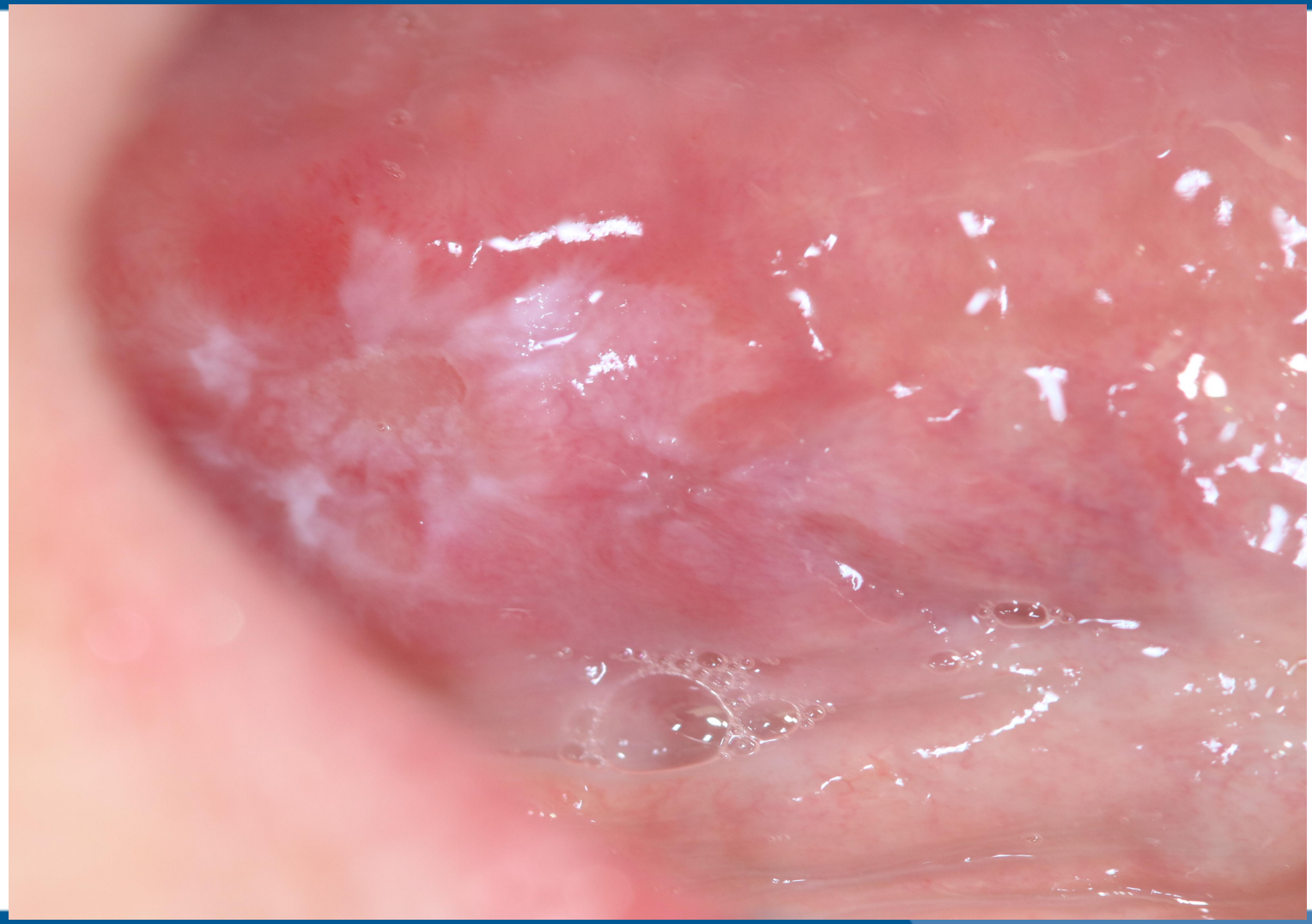

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Investigation and treatment

33-year old male - referral from public dentist

First visit: 10th of October 2016

Medical background:

Disease: 0

Medication: 0

Smoking: No

Snuff: 3 packets/ week

Symptoms: 0

Debut: 4 months ago

Investigation and treatment

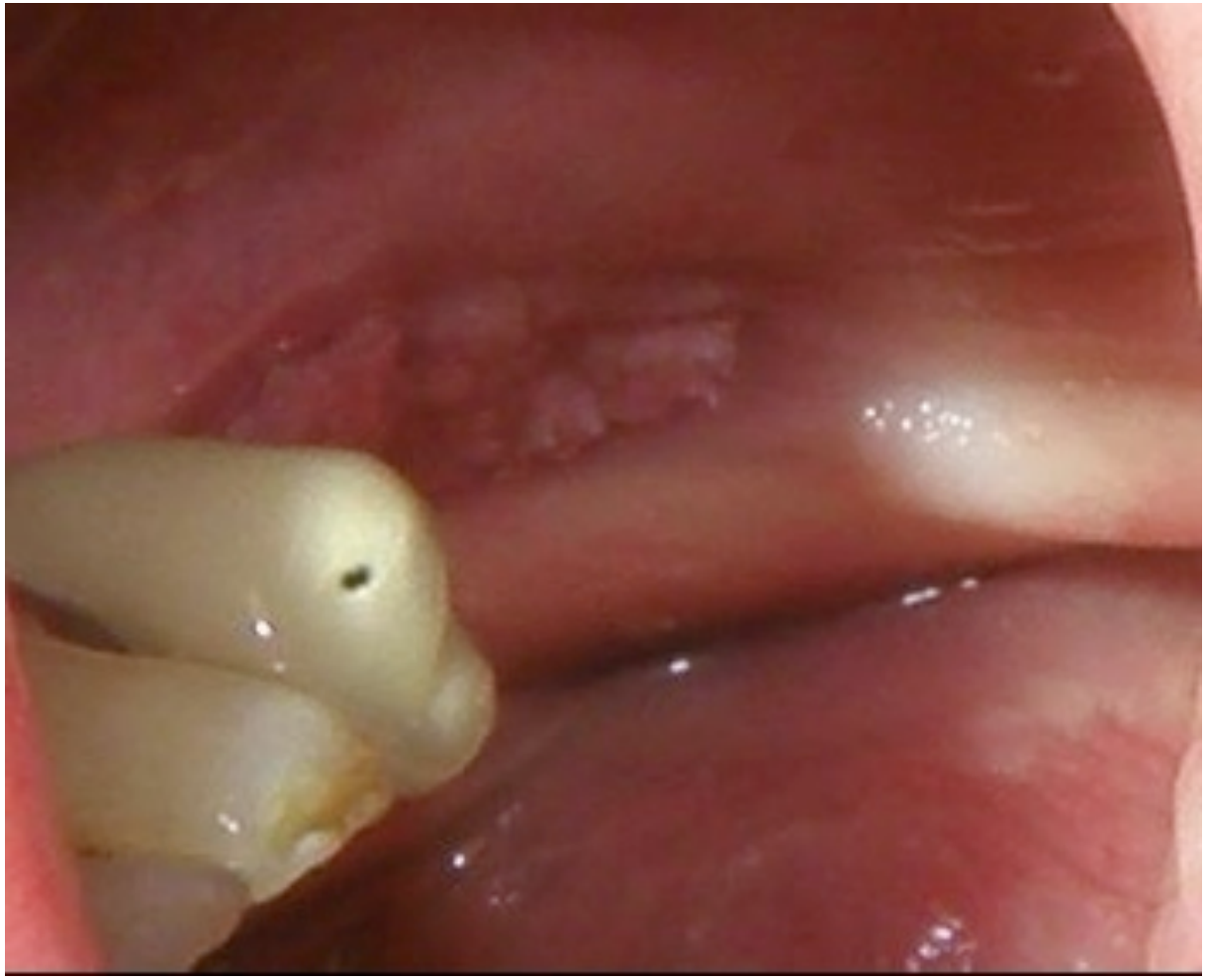
Referal to oral surgery department – incision biopsy

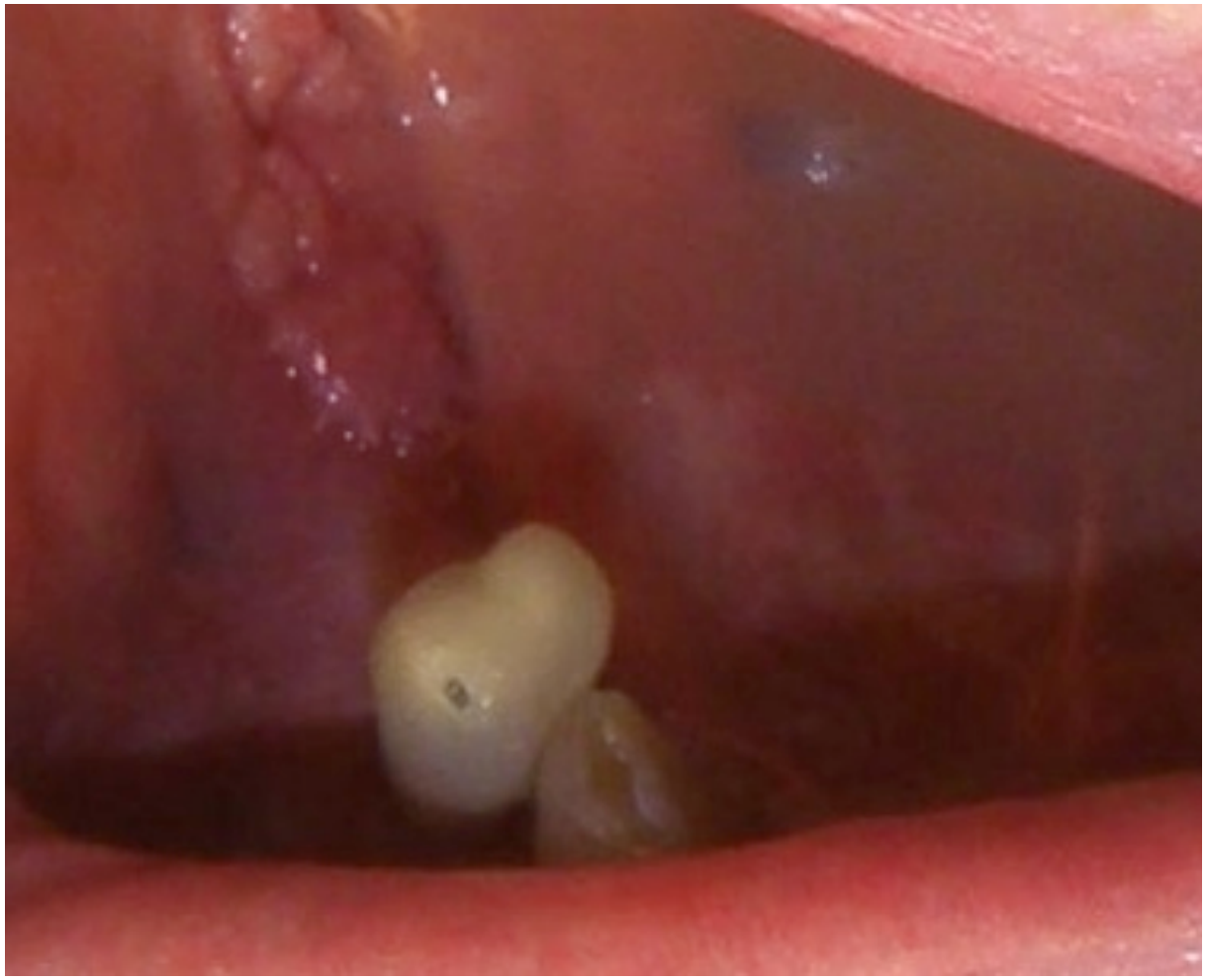
Referal to oral radiology department - CT

PAD – pyogenic granuloma

Excision biopsy

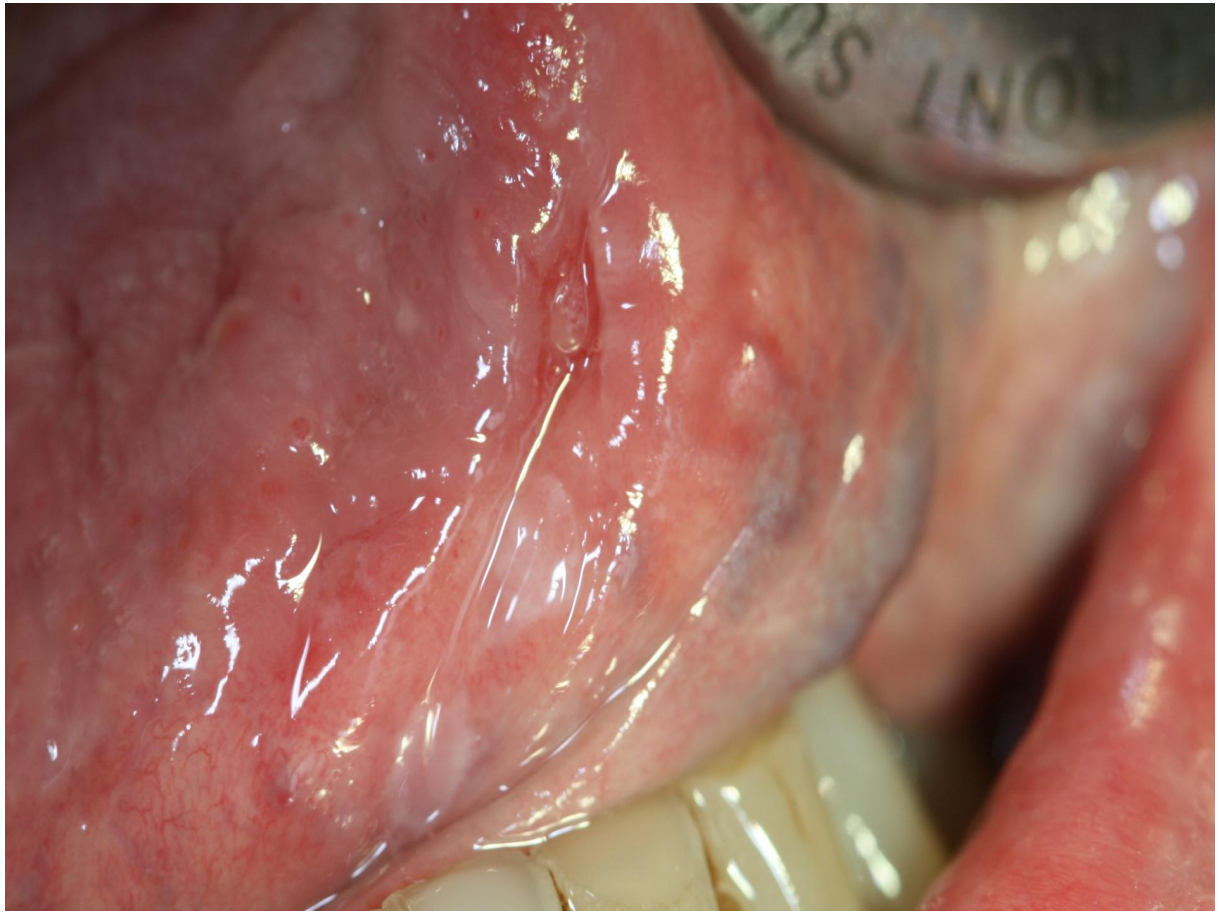
First visit in 2016



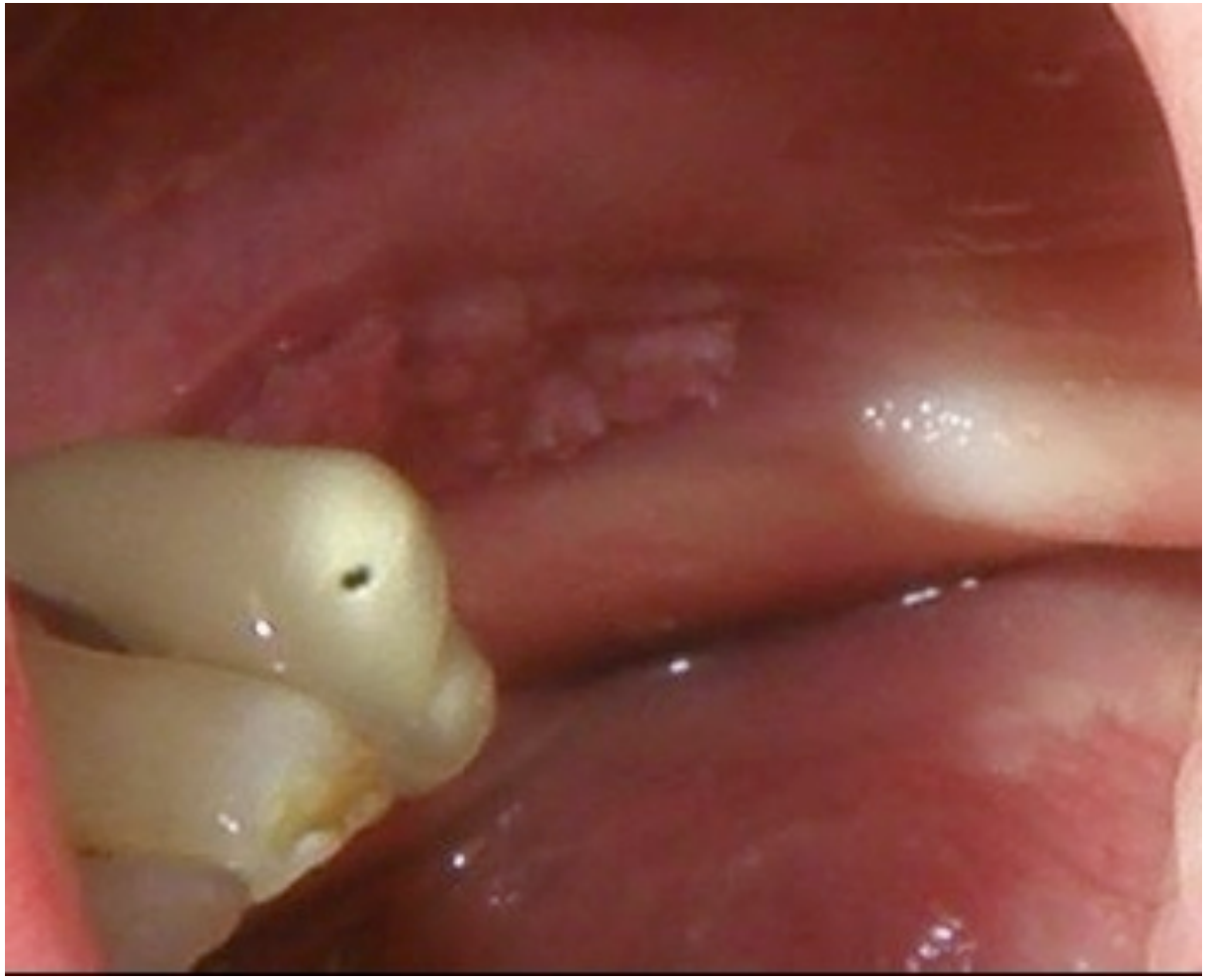


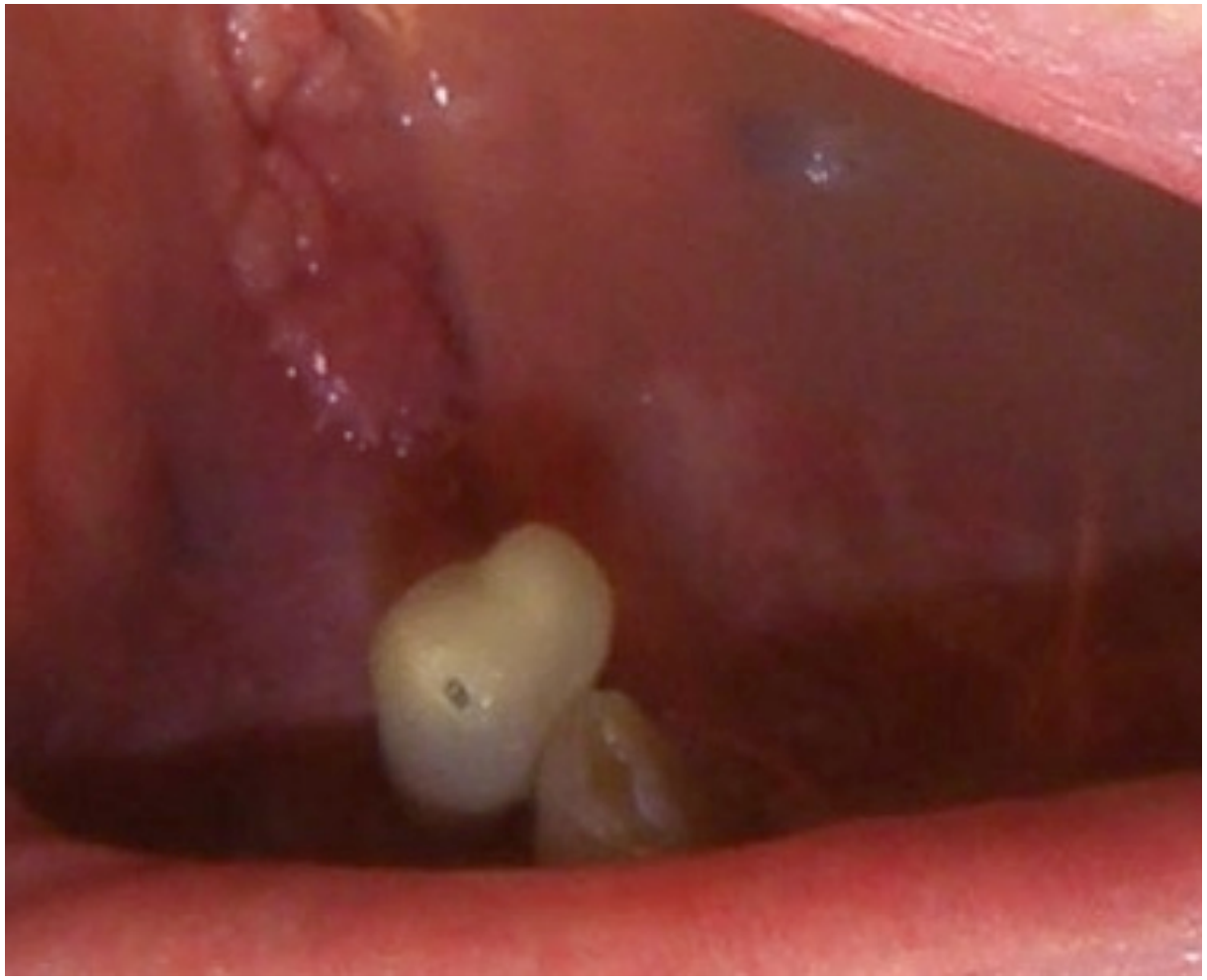
First visit in 1998

Second visit in 2007



9 years later - third visit was in 2016





88-year old male - referral from public dentist

9 years later, new referal, new examination on 1st of Mars 2016

Medical background:

Disease: Prostate disease

Medication: betolvidon, levaxin, normorix

Smoking: No

Snuff: No

Symptoms: 0

Debut: 5 months ago

Investigation and treatment

Excision biopsy

PAD – papilloma

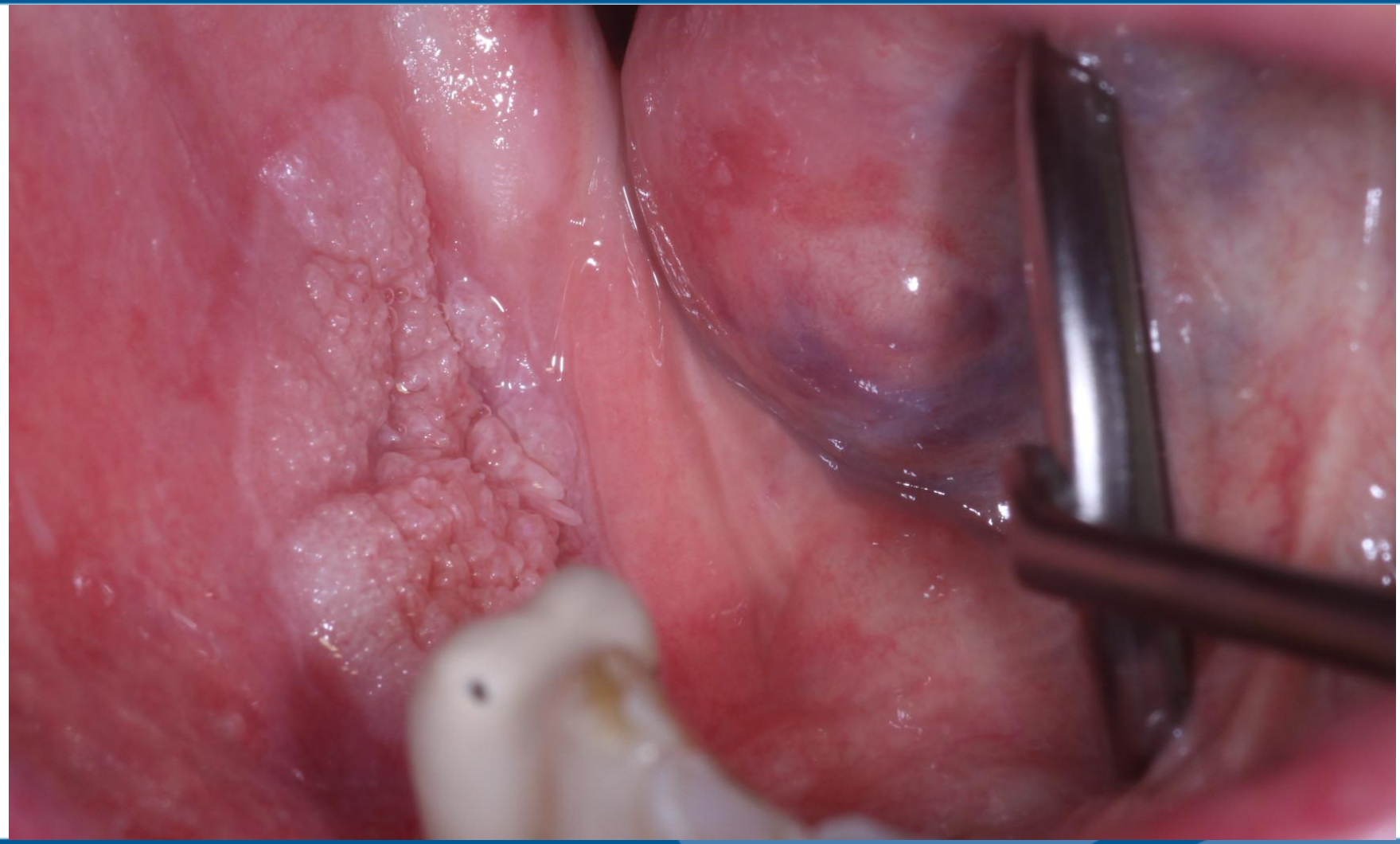
Third visit: two months later on 8th of April 2016

Investigation and treatment

Third visit: two months later on 28th of April 2016

Investigation and treatment

Third visit: two months later on 28th of April 2016



Investigation and treatment

21-year old female - referral from public dentist

First visit: 20th of January 2014

Medical background:

Disease: 0

Skin lesions: para-psoriasis

Medication: 0

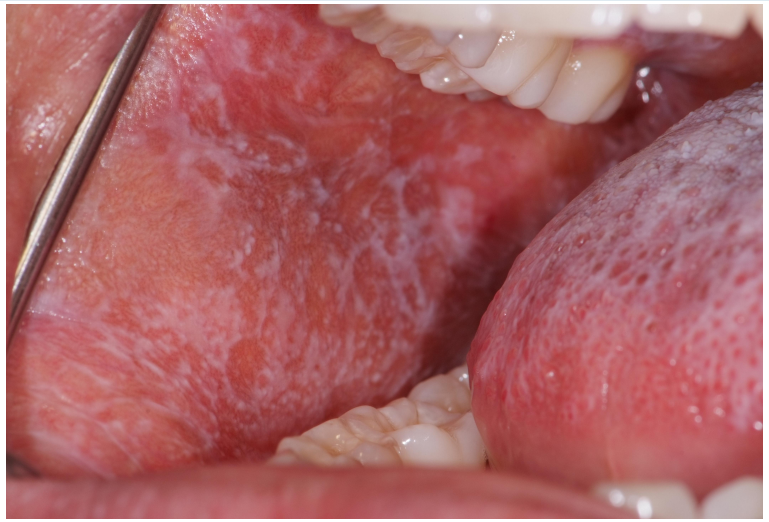
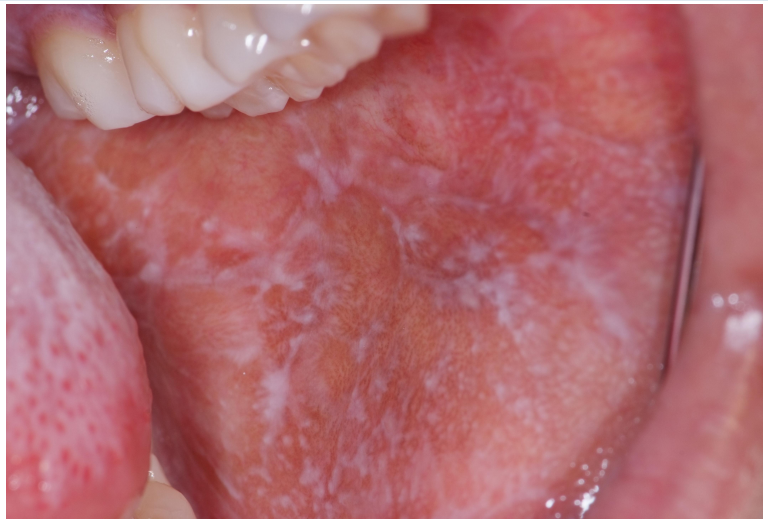
Smoking: 20 cig/ day

Snuff: No

Symptoms: burning sensation and tenderness on tongue and buccal mucosa

Debut: 7 months ago

Investigation and treatment



Investigation and treatment

51-year old male - referral from private dentist

First visit: 29th of October 2014

Medical background:

Disease: 0

Medication: 0

Smoking: 15 cig/ day

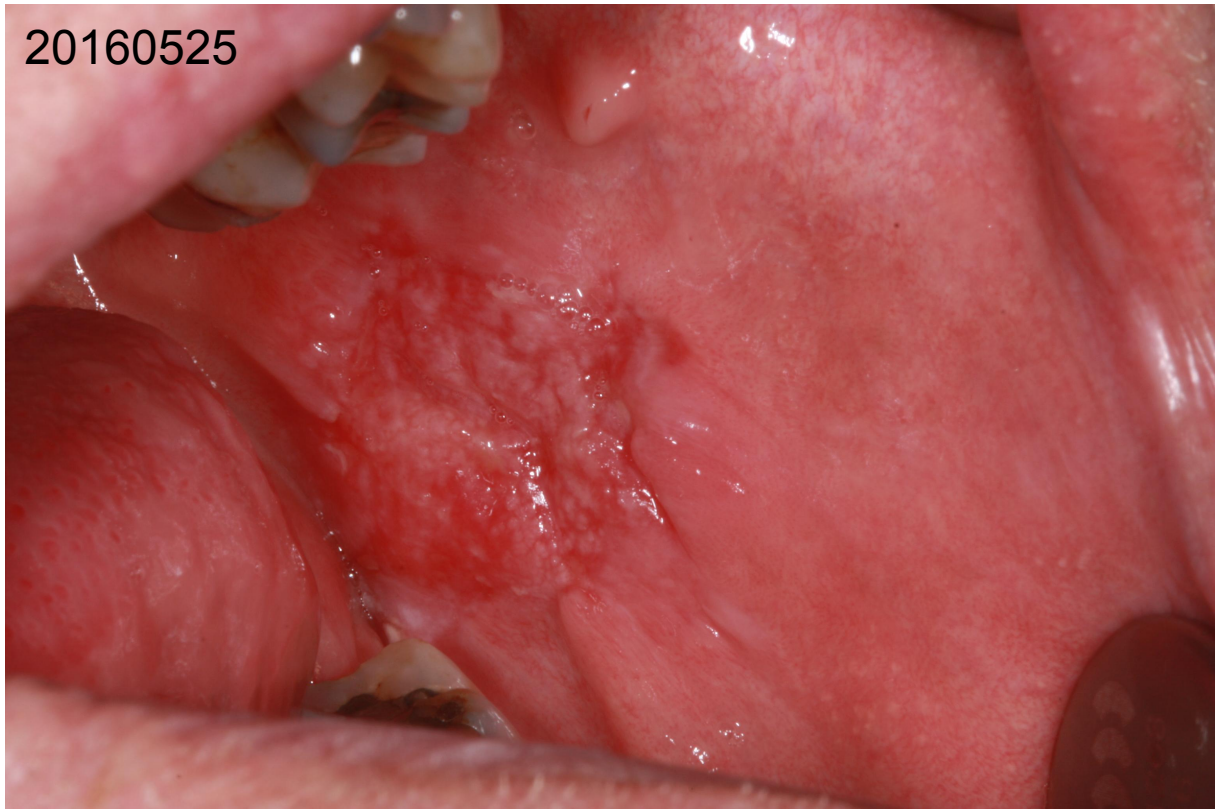
Snuff: 3 packets/ week

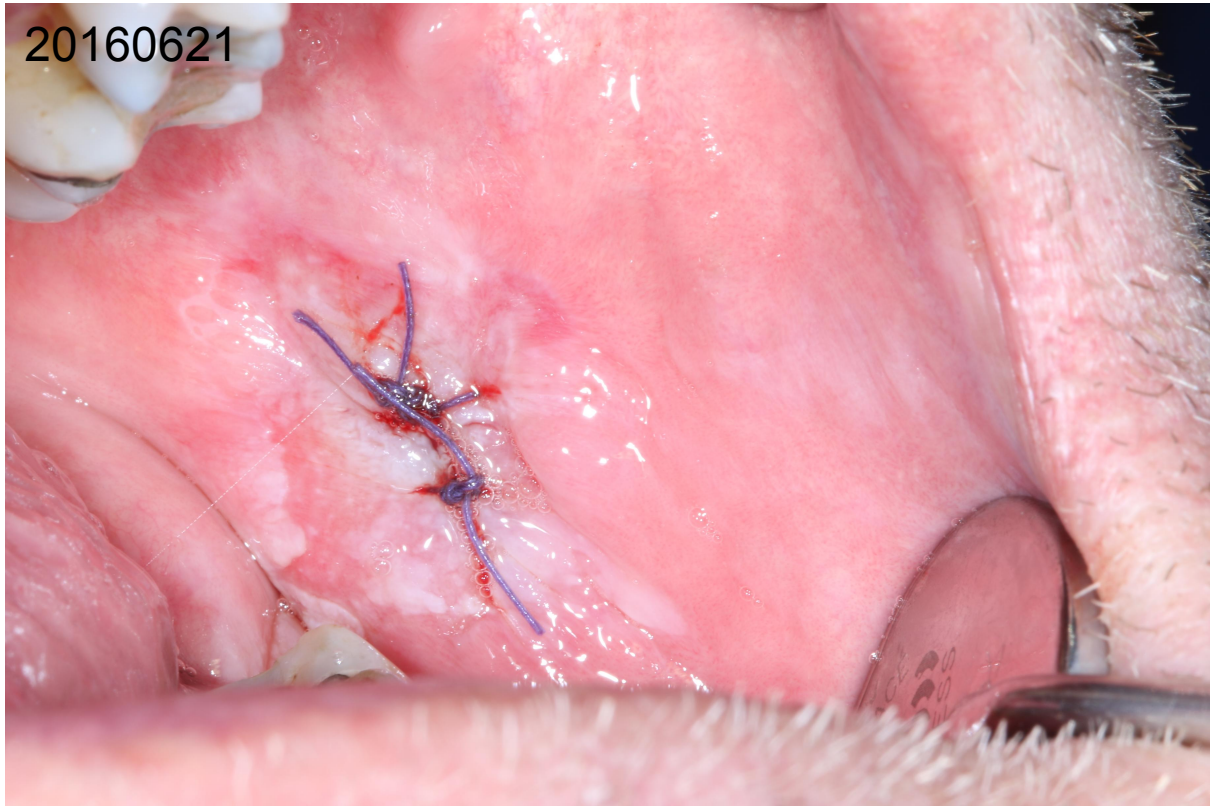
Symptoms: no symptoms

Debut: dentist discovered lesion

Investigation and treatment

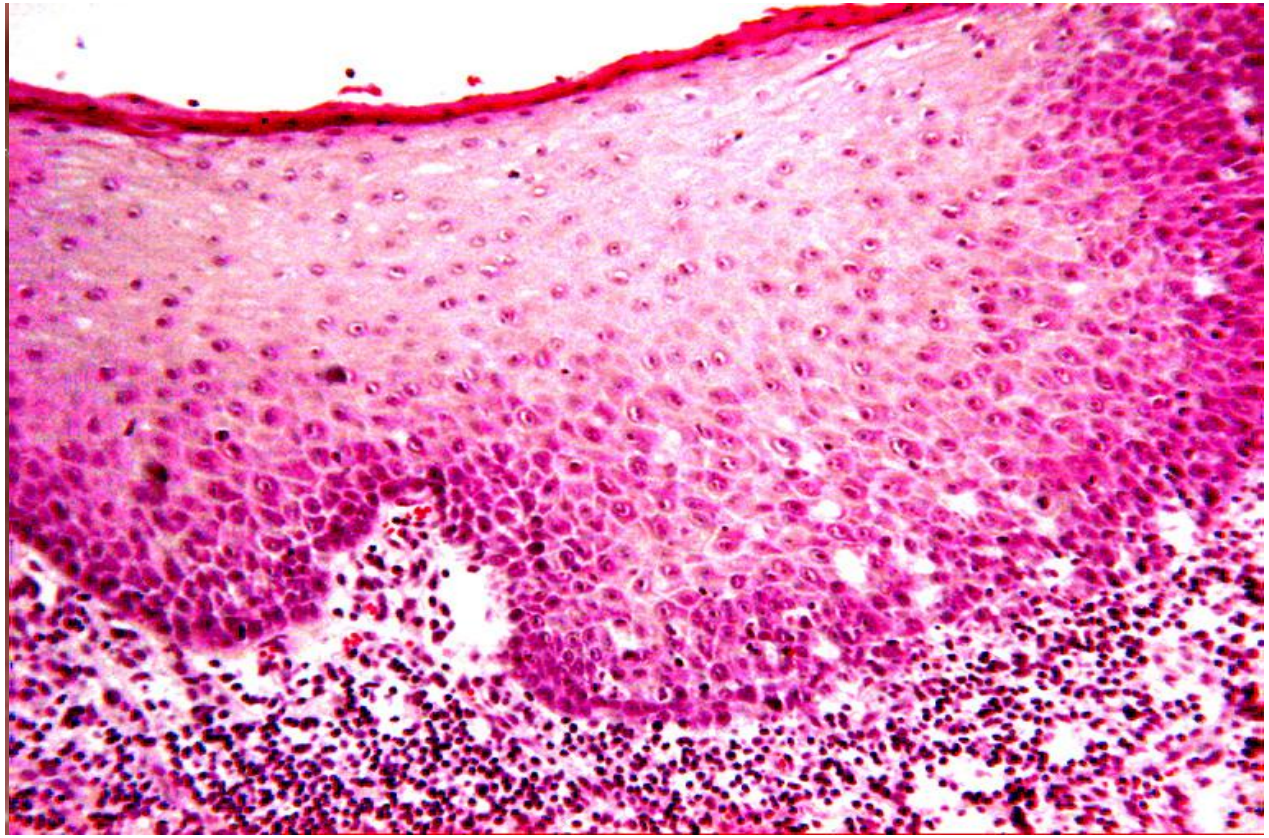
Investigation and treatment





Investigation and treatment

First visit in 2009



Investigation and treatment

76-year old male - referral from private dentist

First visit: 4th of June 2009

Medical background:

Disease: 0

Medication: 0

Smoking: No

Snuff: No

Symptoms: no symptoms

Debut: dentist discovered a change in the lesion in 2013

Investigation and treatment

WHO definition of oral leukoplakia

A white plaque of questionable risk having excluded (other) known diseases or disorders that carry no increased risk for cancer”

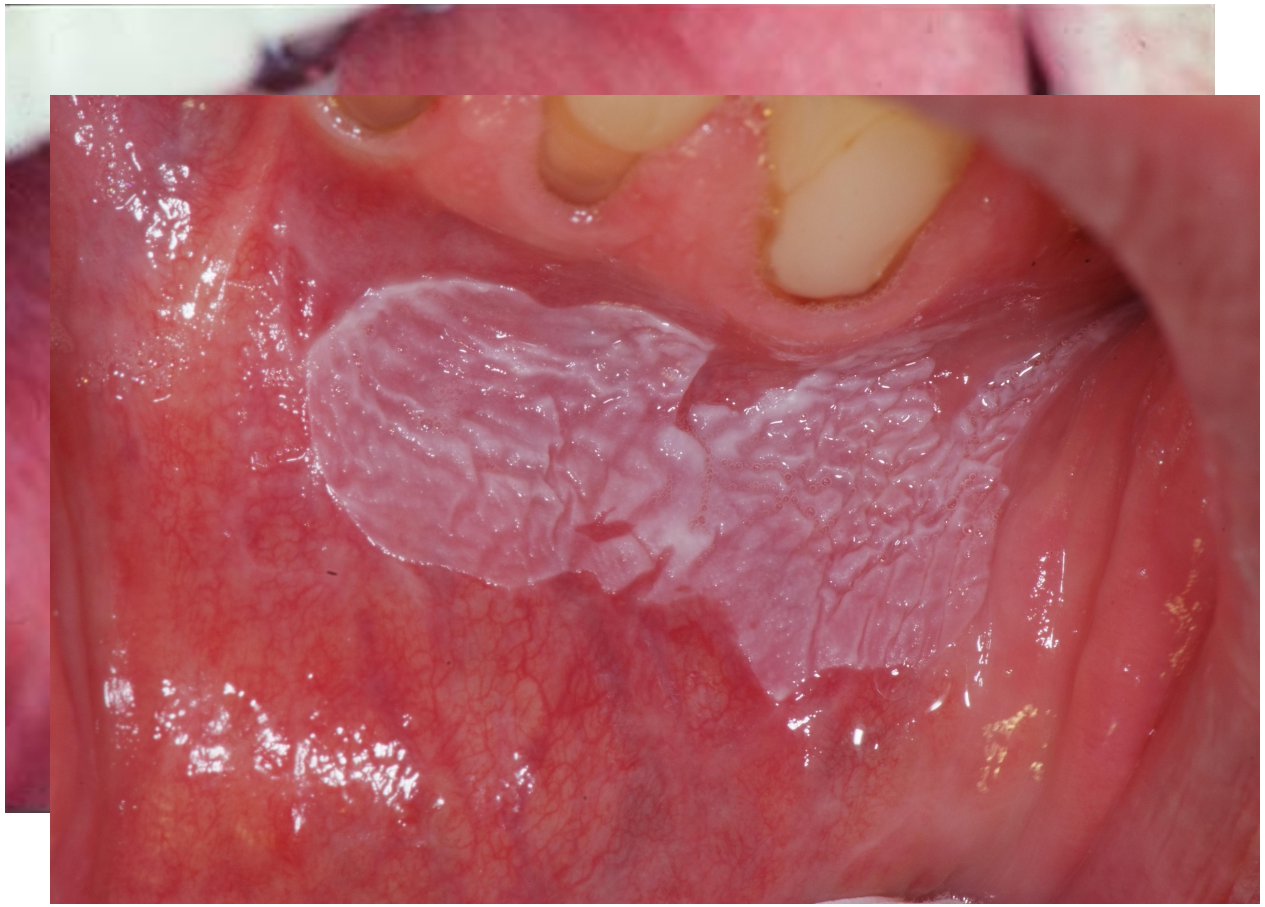
Homogenous

Non-homogenous

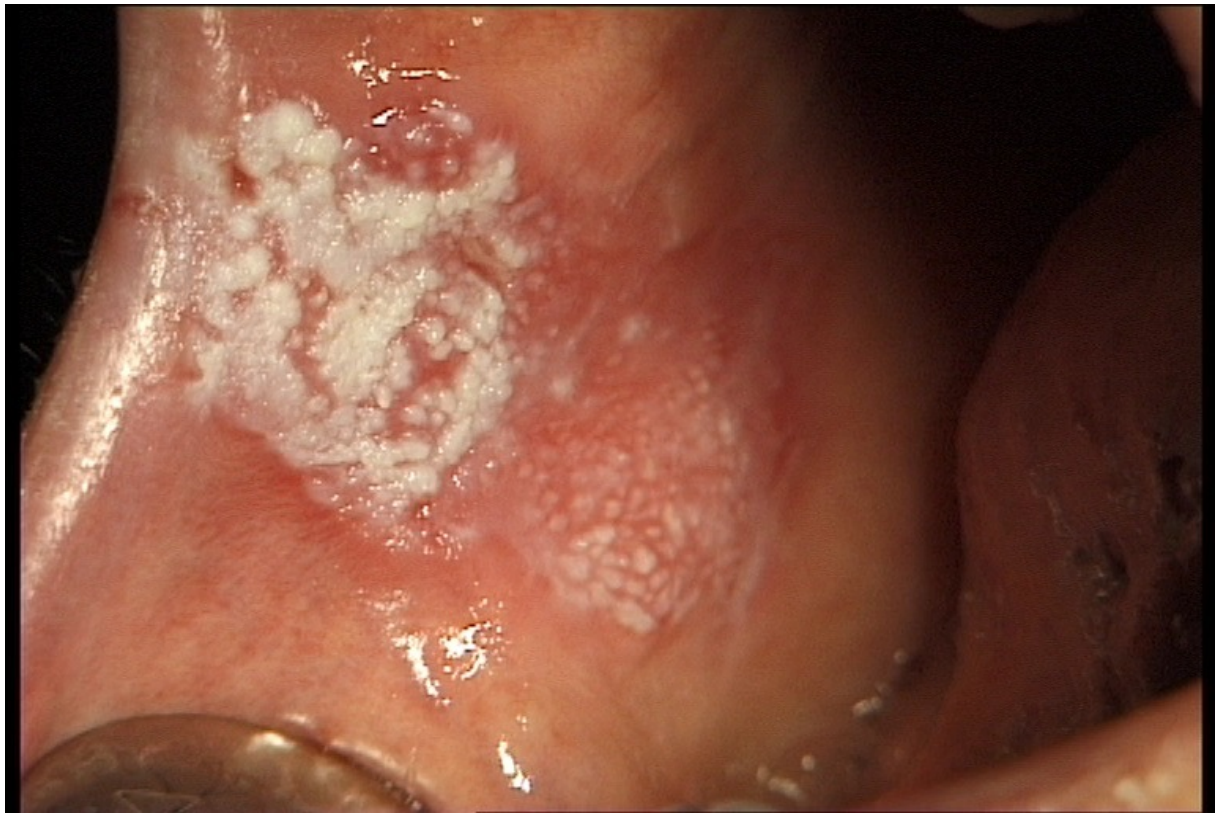
Proliferativ verrucous leukoplakia

van der Waal I. Potentially malignant disorders of the oral and oropharyngeal mucosa; terminology, classification and present concepts of management. Oral Oncol. 2009;45(4-5):317-23

Homogenous leukoplakia



Non-homogenous leukoplakia



Malignant transformation in oral leukoplakia

Study/ year	Country	Subjects n	Follow-up (years)	Transformation %
Pindborg et al., 1968	Denmark	214	3,7	3,73
Silverman et al., 1976	India	4762	2	0,10
Banoczy et al., 1977	Hungary	670	9,8	6,00
Silverman et al., 1984	USA	257	8,1	17,50
Lind, 1987	Norway	157	9,3	8,92
Schepman et al., 1998	Netherlands	166	2,5	12,05
Ho et al., 2012	UK	91	5	24,10

Warnakulasuriya S, Ariyawardana A. Malignant transformation of oral leukoplakia: a systematic review of observational studies. J Oral Pathol Med. 2016;45(3):155-66.

Risk factors for malignant transformation

Female gender

Long duration of leukoplakia

Leukoplakia in non-smokers (idiopathic leukoplakia)

Location on the tongue and/or floor of the mouth

Size > 200 mm^2

Non-homogeneous type

Presence of C. albican

Presence of epithelial dysplasia

van der Waal I. Potentially malignant disorders of the oral and oropharyngeal mucosa; terminology, classification and present concepts of management. Oral Oncol. 2009;45(4-5):317-23

Warnakulasuriya S, Ariyawardana A. Malignant transformation of oral leukoplakia: a systematic review of observational studies. J Oral Pathol Med. 2016;45(3):155-66.

Investigation and treatment

33-year old male - referral from private dentist

First visit: 7th of april 2014

Medical background:

Disease: 0

Medication: 0

Smoking: No

Snuff: No

Symptoms: burning symptoms on tongue

Debut: burning symptoms for 8 months

Investigation and treatment

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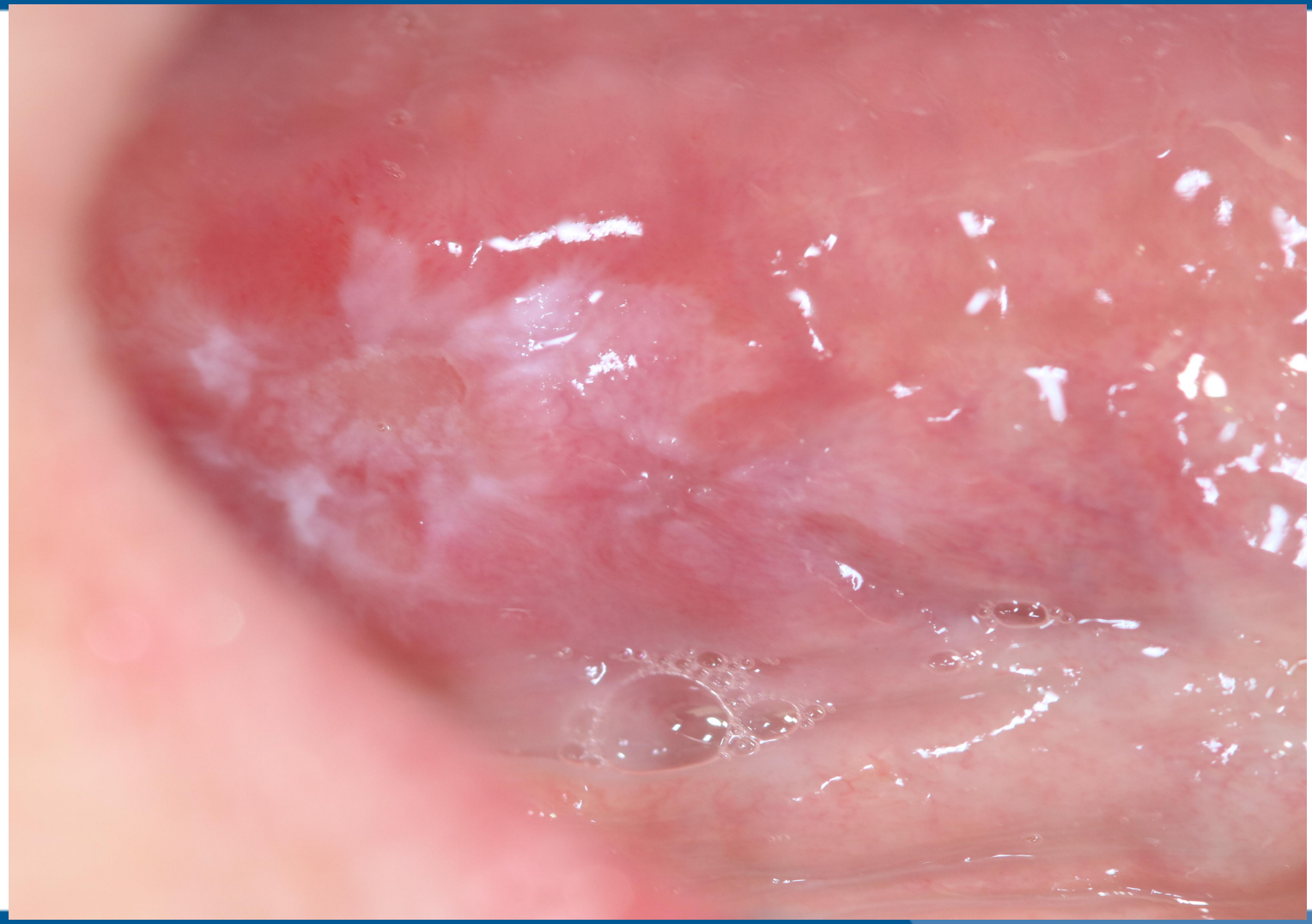
Investigation and treatment



65-year old female - referral from public dentist

First visit: 17th of January 2017

Medical background:

Disease: Hypertension

Medication: bisoprolol

Smoking: No

Snuff: No

Symptoms: soreness on tongue

Debut: symptoms for several months

Investigation and treatment

Incision biopsy

PAD – SCC

Referral to Oto-rhino-laryngology Clinic at Sahlgrenska

Investigation and treatment

69-year old female - referral from private ORL-specialist

First visit: 8th of April 2014

Medical background:

Disease: hypertension

Medication: Losartan

Smoking: No

Snuff: No

Symptoms: burning symptoms on gingivae

Debut: symptoms started 3 months ago

Investigation and treatment

Incision biopsy x 2 - for HTx and IF

PAD – bullous pemphigoid

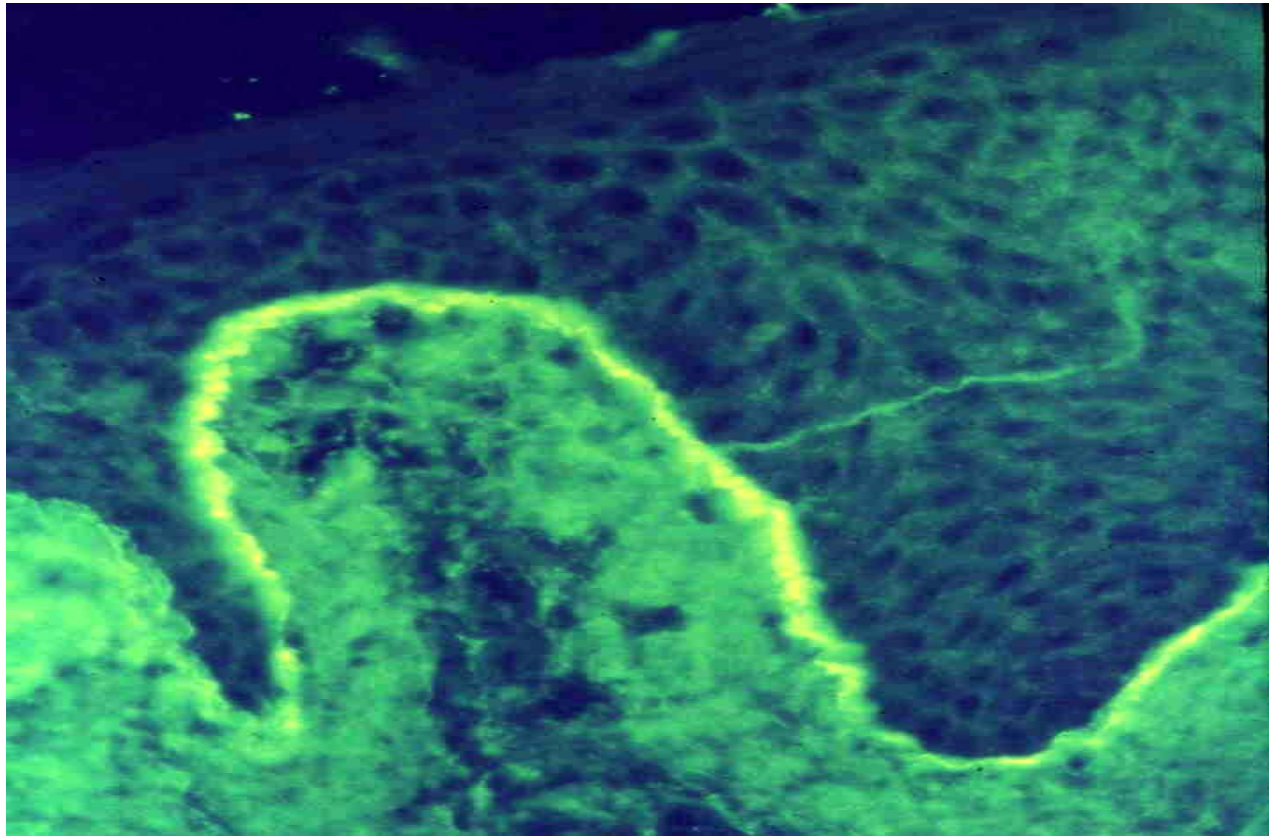
Individually designed re-call program after cortisone treatment

Bullous pemphigoid

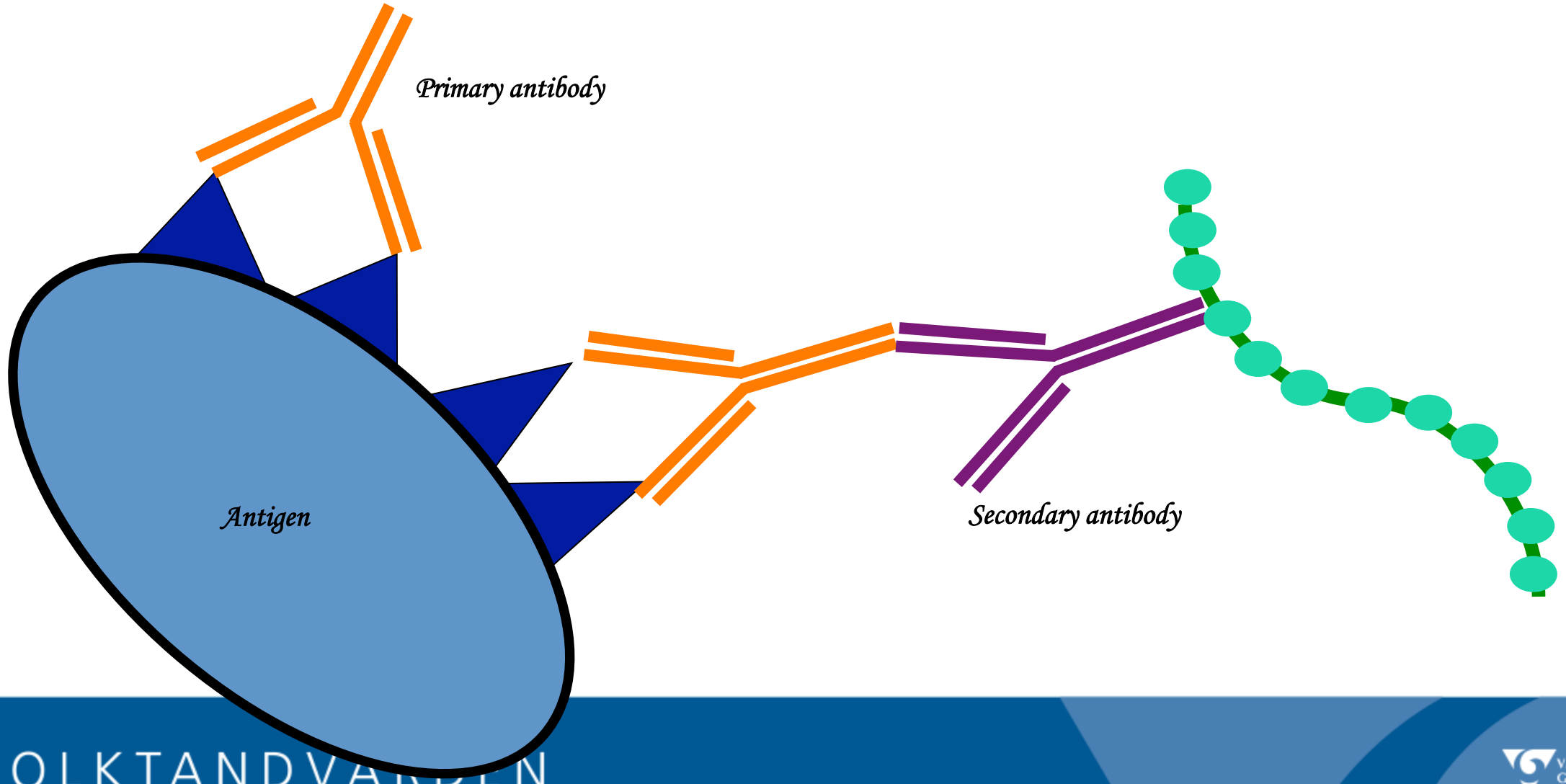
Bullous pemphigoid

Positive Nikolski´s test

Immunofluorescence

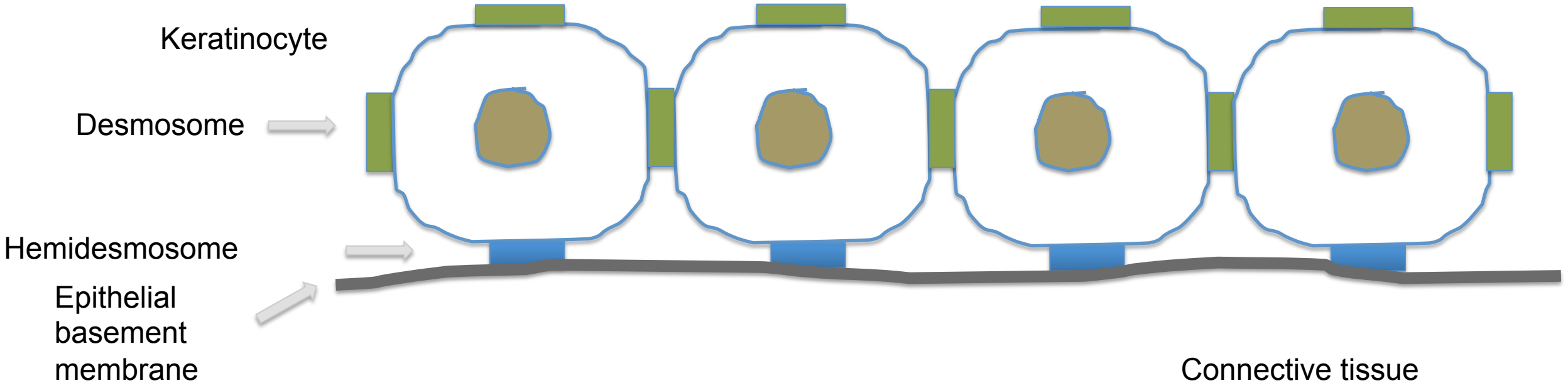


Immunohistochemistry



Bullous pemphigoid

Epithelial basal cells



Prognosis

Good prognosis if optimal oral hygiene can be achieved

Risk of long term cortisone treatment

Risk of siccatriciell

Investigation and treatment

57-year old male - referral from dermatologist

First visit: 22nd of January 2016

Medical background:

Disease: 0

Medication: Valaciklovir

Smoking: No

Snuff: No

Symptoms: extrem pain in the whole mouth including lips

Debut: symptoms started 1 month ago but got aggrevated 1 week ago

57-year old male - referral from dermatologist






Investigation and treatment

Medication with clobetasol and antifungal

Incision biopsy: PAD – picture in accordance with erythema multiforme

Check up after 3 and 5 days

Erythema multiforme

Aetiology

1) Viral infection such as HSV-I
2) Bacterial infection
3) Medication
4) Immunological reaction

Two types:

1) Minor – only effecting one site
2) Major – effect several sites

Related lesions:

1) Steven-Johnsons syndrome
2) Toxic epidermic necrolysis

1. Bastuji-Garin S, Rzany B, Stern RS, Shear NH, Naldi L, Roujeau JC. Clinical classification of cases of toxic epidermal necrolysis, Stevens-Johnson syndrome, and erythema multiforme. Arch Dermatol. 1993;129(1):92-6.

Investigation and treatment

23-year old male - referral from private dentist

First visit: 23rd of July 2014

Medical background:

Disease: 0

Medication: 0

Smoking: No

Snuff: No

Symptoms: no symptoms

Debut: patient discovered lesion 2 years ago

Investigation and treatment

Excision biopsy

PAD – ossifying fibroma

Telephone contact after excision

Investigation and treatment

23-year old male - referral from private dentist

First visit: 4th of November 2014

Medical background:

Disease: 0

Medication: Levaxin

Smoking: No

Snuff: No

Symptoms: no symptoms

Debut: patient discovered lesion 2 years ago

Investigation and treatment

Excision biopsy

PAD – hemangioma

Telephone contact after excision

Investigation and treatment

Investigation and treatment

75-year old female - referral from private dentist

First visit: 4th of November 2014

Medical background:

Disease: hypertension, mite dust allergy

Medication: Losartan, sparkal, cetirizin

Smoking: No

Snuff: No

Symptoms: stiffness and tightness

Debut: patient discovered lesion 3 months ago

Investigation and treatment

Excision biopsy

PAD – actinic cheilitis with moderate dysplasia

Re-call every third month

Investigation and treatment

Investigation and treatment

Investigation and treatment

54-year old female - referral from private dentist

First visit: 4th of November 2014

Medical background:

Disease: 0

Medication: 0

Smoking: No

Snuff: No

Symptoms: No

Debut: dentist discovered lesion 6 months ago

Investigation and treatment

Excision biopsy

PAD – melanoplakia

Telephone contact after excision

Investigation and treatment

43-year old male - referral from public dentist

First visit: 9th of December 2015

Medical background:

Disease: 0

Medication: 0

Smoking: No

Snuff: No

Symptoms: No symptoms

Debut: patient discovered lesion 2 weeks ago

Investigation and treatment

Excision biopsy

PAD – Papilloma

Telephone contact after excision

HPV and oral potentially malignant disorders (OPMD)

In healthy oral mucosa – 10 HPV types have been identified
(Types 2, 6, 7, 11, 13, 16, 18, 31, 33, and 35)

In benign and malignant oral lesions – 28 HPV types have been identified (Types 1, 2, 3, 4, 6, 7, 10, 11, 13, 16, 18, 31, 32, 33, 35, 39,45, 51, 52, 55, 56, 57, 58, 59, 66, 69, 72, and 73)

13/ 28 are HR-HPV – HPV 16 being of most high risk in malignant lesions

34 % prevalence of HPV in oral malignant lesions
12 % prevalence of HPV in normal oral mucosa
74 % prevalence of HPV in TSCC and BOTSCC

Syrjanen S, Lodi G, von Bultzingslowen I, Aliko A, Arduino P, Campisi G, et al. Human papillomaviruses in oral carcinoma and oral potentially malignant disorders: a systematic review. Oral Dis. 2011;17 Suppl 1:58-72.

Nasman A, Nordfors C, Holzhauser S, Vlastos A, Tertipis N, Hammar U, et al. Incidence of human papillomavirus positive tonsillar and base of tongue carcinoma: a stabilisation of an epidemic of viral induced carcinoma? Eur J Cancer. 2015;51(1):55-61.

Biomarkers for malignant transformation in oral leukoplakias

- Podoplanin
- p53
- HPV 16
- Ki-67
- Cytokeratin 8
- p27