

TUGSE Case Series:

An ulceration differential known to Oral Surgeons?

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Background

- Traumatic ulcerative granuloma with stromal eosinophilia (TUGSE) is a rare, benign, and self-limiting condition of the oral mucosa.
- Its aetiology is poorly understood; trauma is sometimes implicated (1).
- TUGSE classically presents as:
 - A rapidly developing persistent ulcer with an elevated or indurated border or
 - An ulcer with a peripheral erythema, a white/yellowish base, and a fibrinous membrane.
- Its appearance may mimic infective or neoplastic processes (2).
- Although ulceration may spontaneously resolve, TUGSE heals rapidly following a biopsy (3).
- The histopathological diagnosis is confirmed by the presence of eosinophils, devoid in classic traumatic oral ulcers (4).

Patient Information

- This is a case series of 11 patients referred to Mid-Yorkshire Teaching Hospitals NHS Trust on a Two-Week Wait Pathway on suspicion of malignancy in 2021-2022.
- 8 clinical photographs depict clinical presentation (Fig. 1 – Fig. 8)

		N=	%
Sex	Male	4	36
	Female	7	64
Age	Average: 57 years		
	Range: 39 – 74 years		
Referral pathway	Fast Track – 2WW	6	
	Routine	0	
	Other	1	
Duration of symptoms	Average: 9.4 weeks		
	Range: 1 – 20 weeks		
Site	Tongue	9	82
	Buccal mucosa	2	18
Traumatic factor	Yes	6	55
	No	5	45

Table 1. Baseline characteristics

Management & Outcomes

- Sharp or fractured teeth identified as source of trauma were smoothed or extracted.
- Removal of traumatic cause prior biopsy did not lead to ulcer resolution warranting an urgent biopsy.
- All patients underwent a diagnostic biopsy.
- Histopathological evaluation confirmed diagnosis of TUGSE (Fig. 9)

COMPLETE RESOLUTION

73% (n=8)

IMPROVEMENT

18% (n=2)

PERSISTENT SYMPTOMS

9% (n=1)

Treated with topical steroids

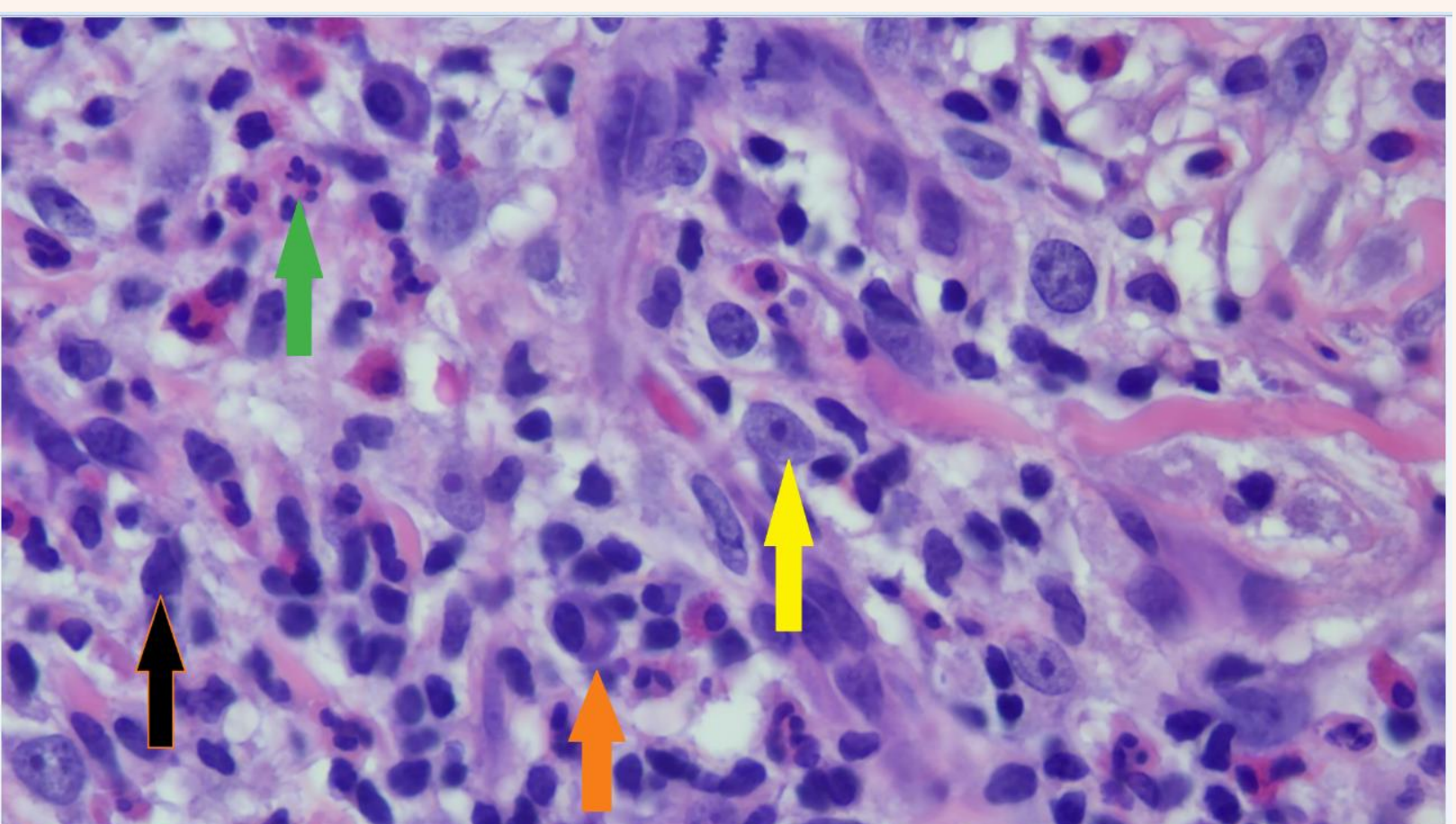
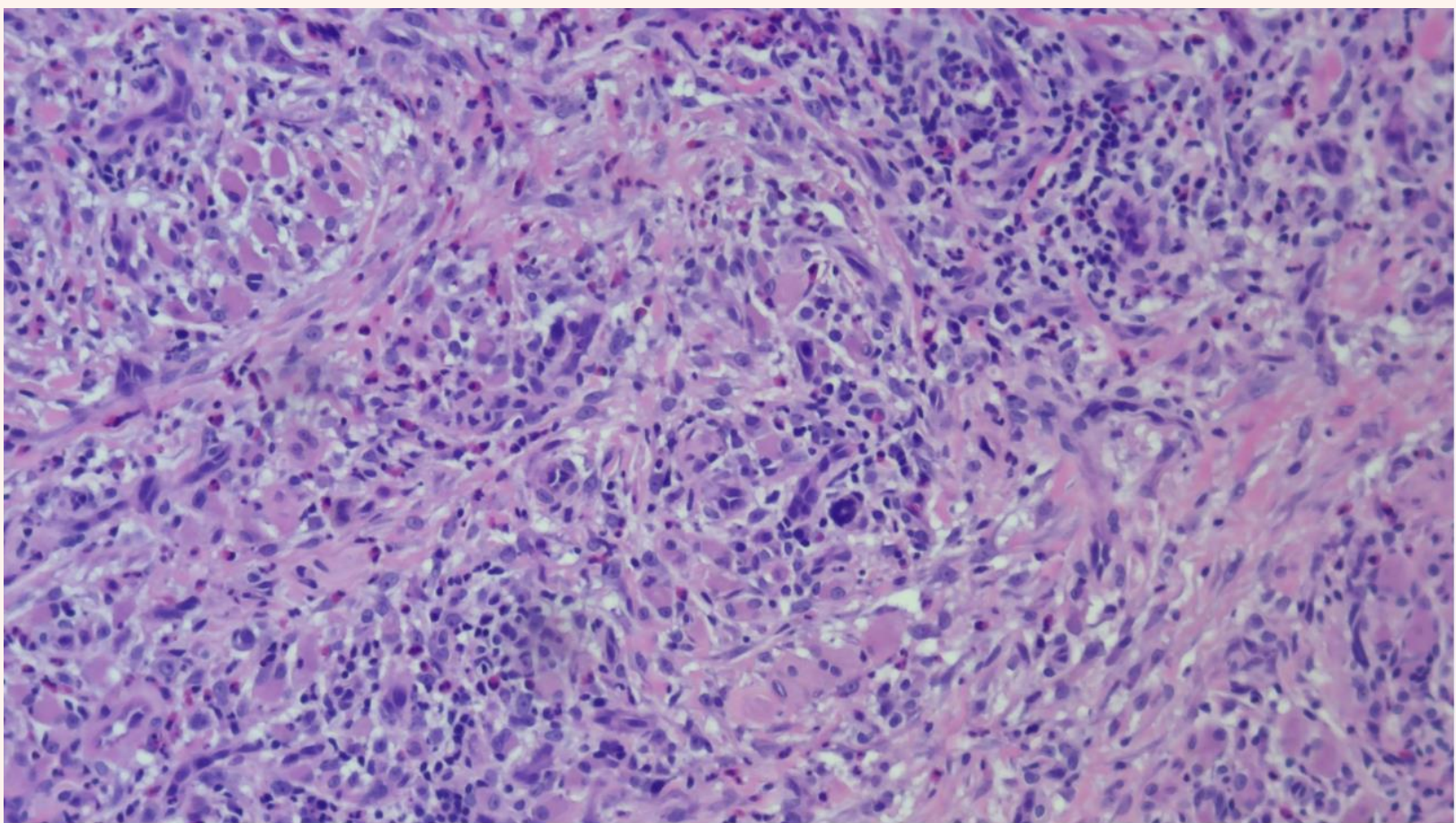


Fig. 9. (a) High power image demonstrates a mixed infiltrate including numerous eosinophils is seen among degenerate skeletal muscle fibres (b) Higher power highlights mixed cellularity infiltrate contains a mixture of eosinophils (Black arrow), neutrophils (Green arrow), histocytes (Yellow arrow), plasma cells (Orange arrow) and lymphocytes.

Key Learning Points:

1. Removal of an obvious traumatic cause may not always lead to ulcer resolution.
2. Malignancy should always be considered as a differential diagnosis in cases of long-standing ulcers, warranting an urgent investigation.
3. TUGSE, although a neoplastic process mimicker, has a good prognosis and heals rapidly following a biopsy, unequivocally confirming the diagnosis.
4. Oral Surgeons should be aware of TUGSE as a rare clinical entity.

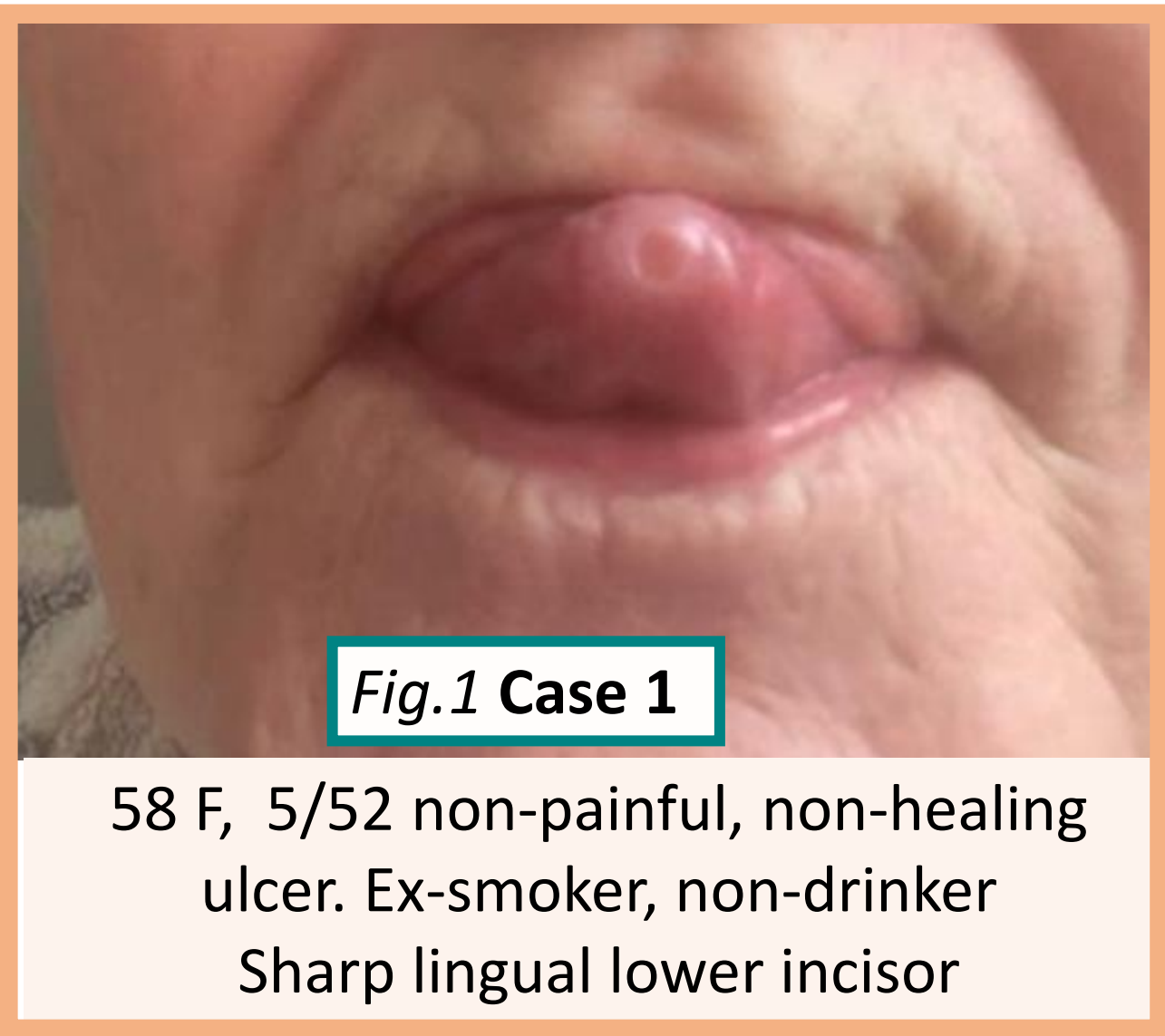


Fig.1 Case 1

58 F, 5/52 non-painful, non-healing ulcer. Ex-smoker, non-drinker
Sharp lingual lower incisor

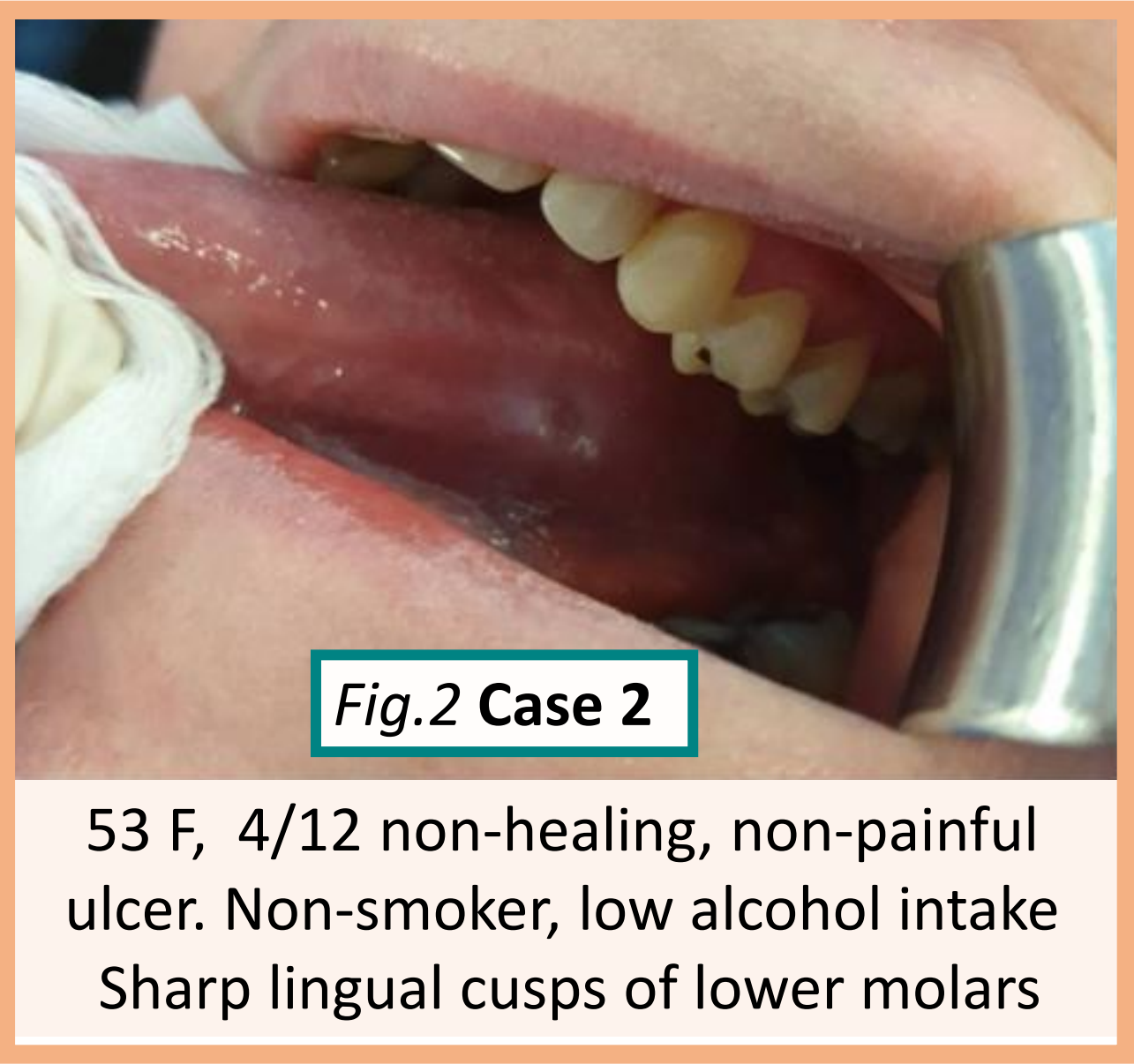


Fig.2 Case 2

53 F, 4/12 non-healing, non-painful ulcer. Non-smoker, low alcohol intake
Sharp lingual cusps of lower molars

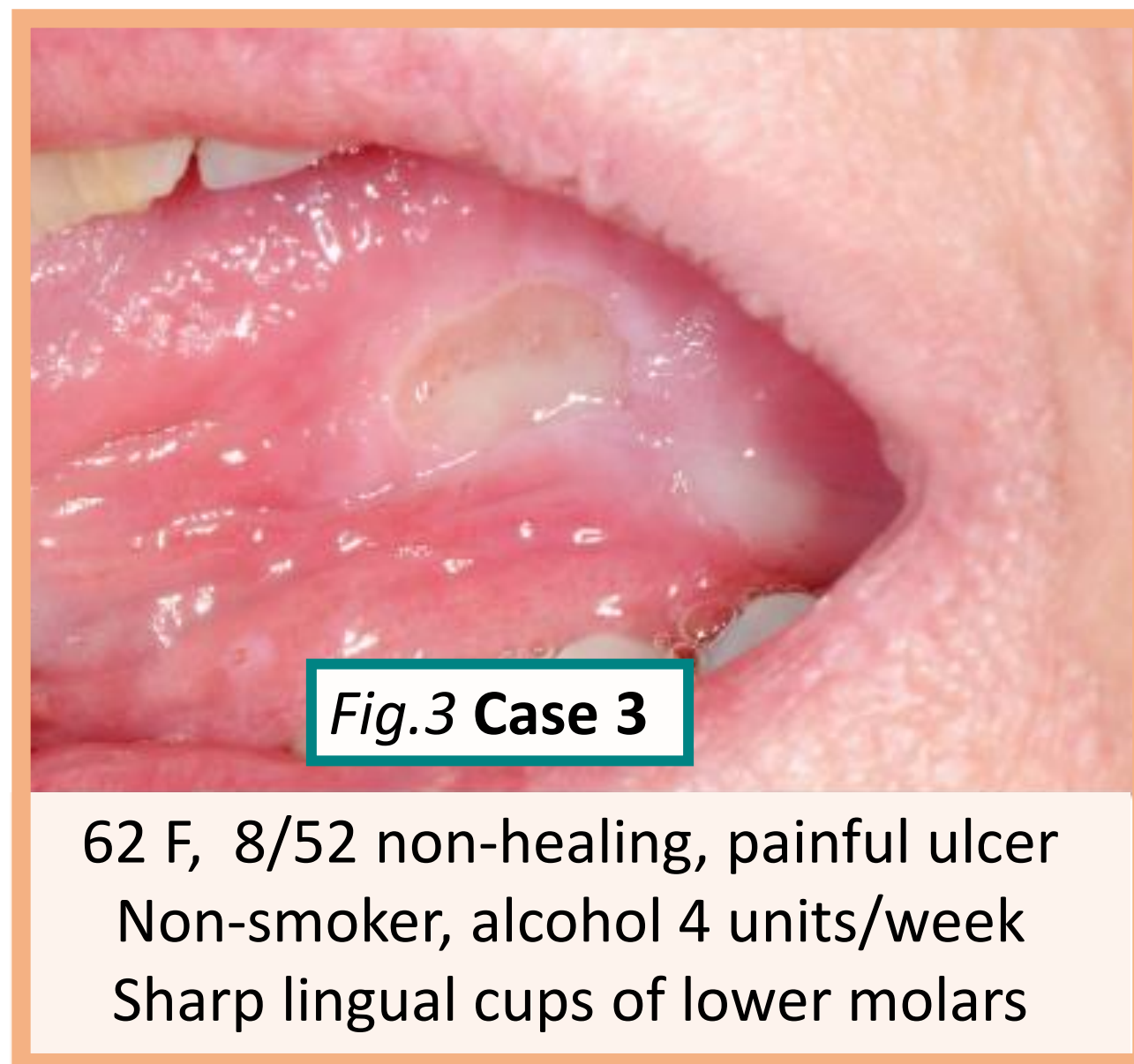


Fig.3 Case 3

62 F, 8/52 non-healing, painful ulcer
Non-smoker, alcohol 4 units/week
Sharp lingual cups of lower molars

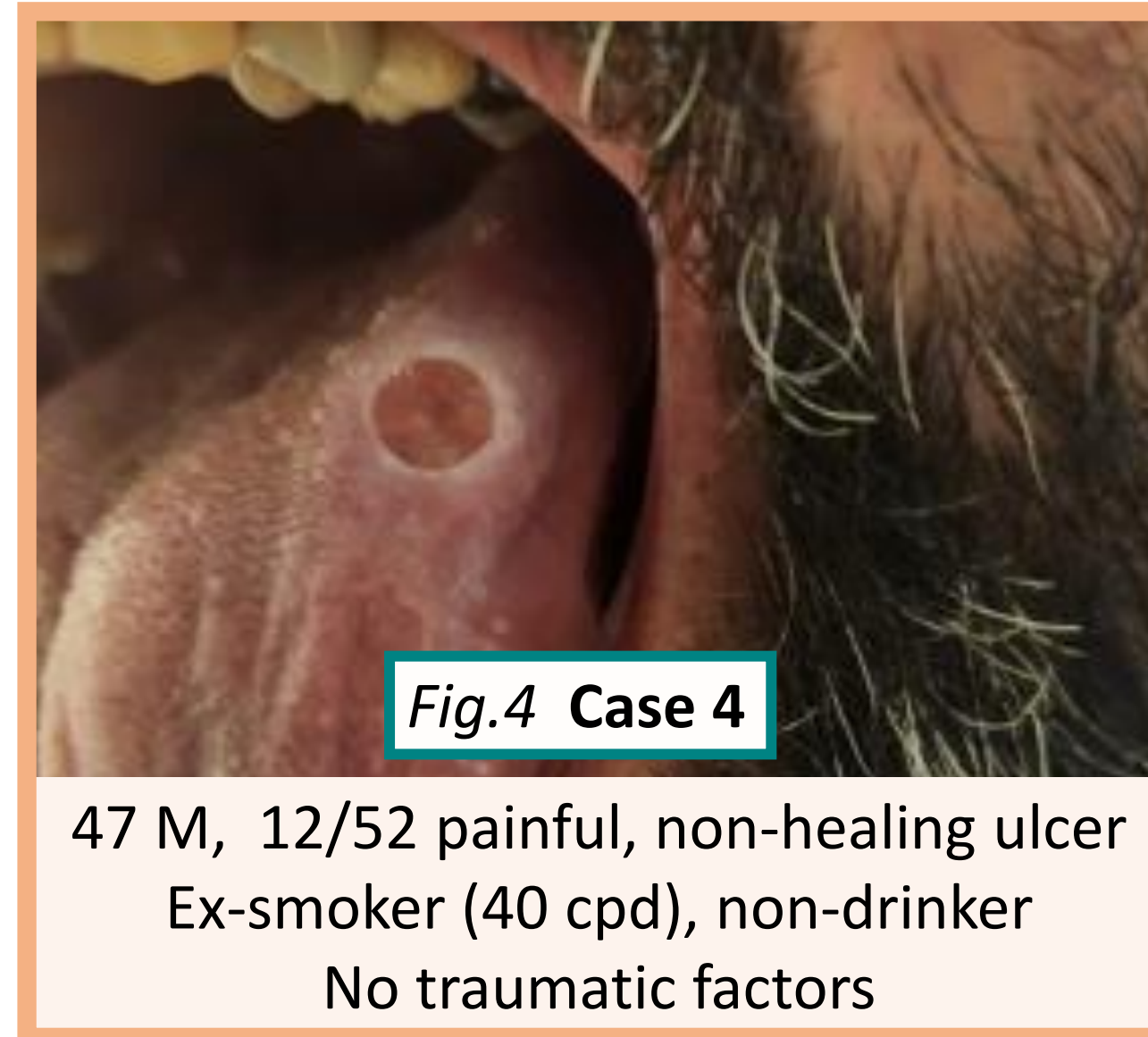
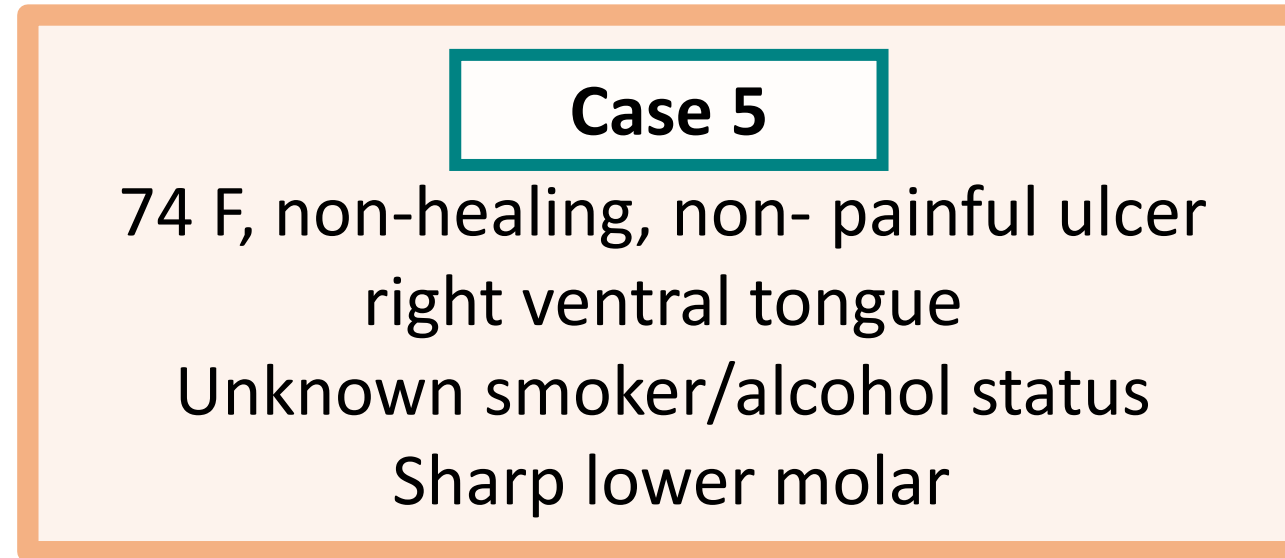


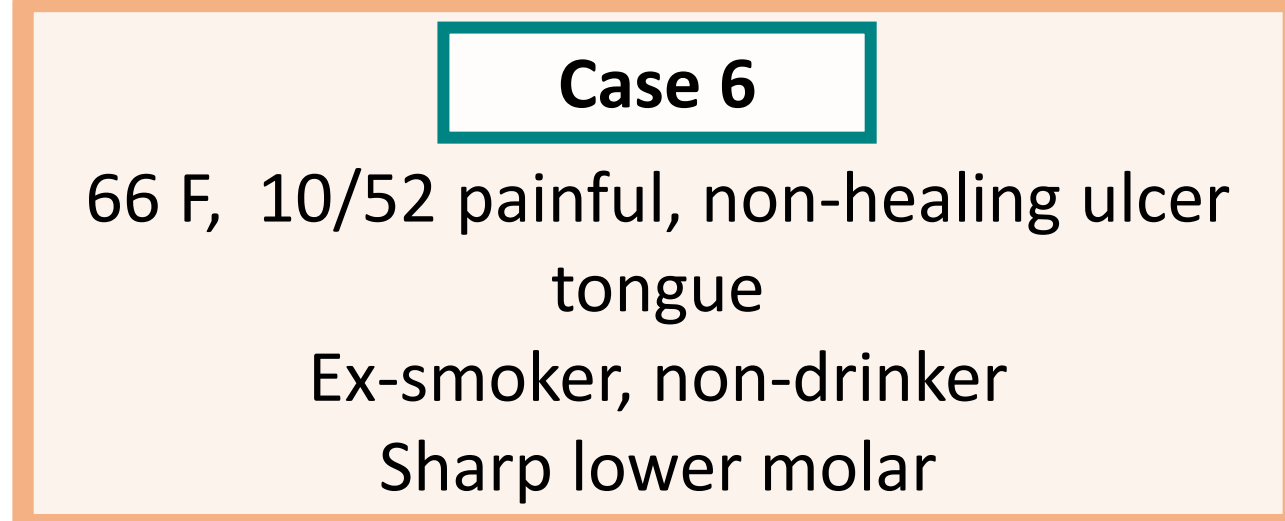
Fig.4 Case 4

47 M, 12/52 painful, non-healing ulcer
Ex-smoker (40 cpd), non-drinker
No traumatic factors



Case 5

74 F, non-healing, non-painful ulcer
right ventral tongue
Unknown smoker/alcohol status
Sharp lower molar



Case 6

66 F, 10/52 painful, non-healing ulcer
tongue
Ex-smoker, non-drinker
Sharp lower molar

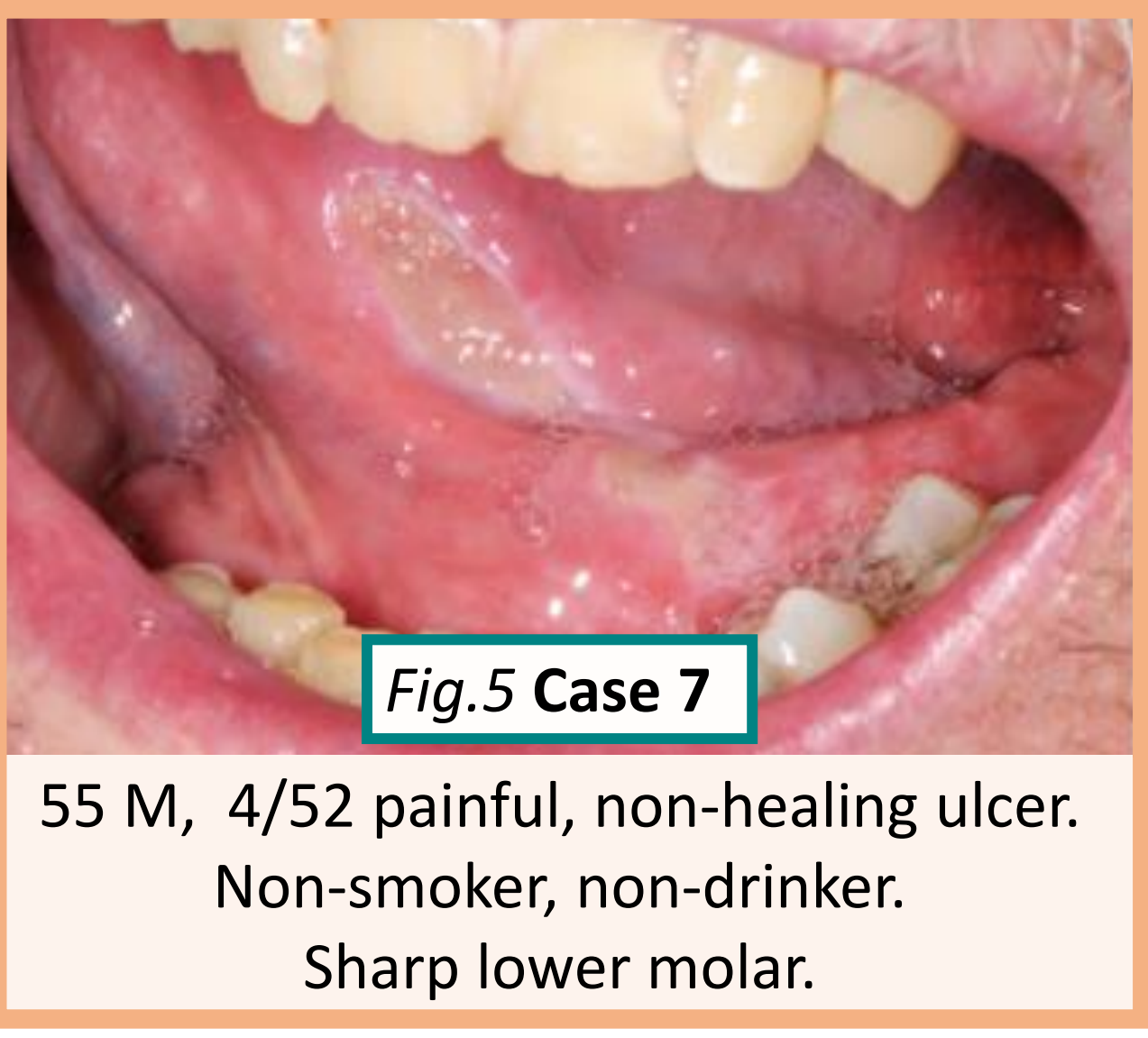


Fig.5 Case 7

55 M, 4/52 painful, non-healing ulcer.
Non-smoker, non-drinker.
Sharp lower molar.

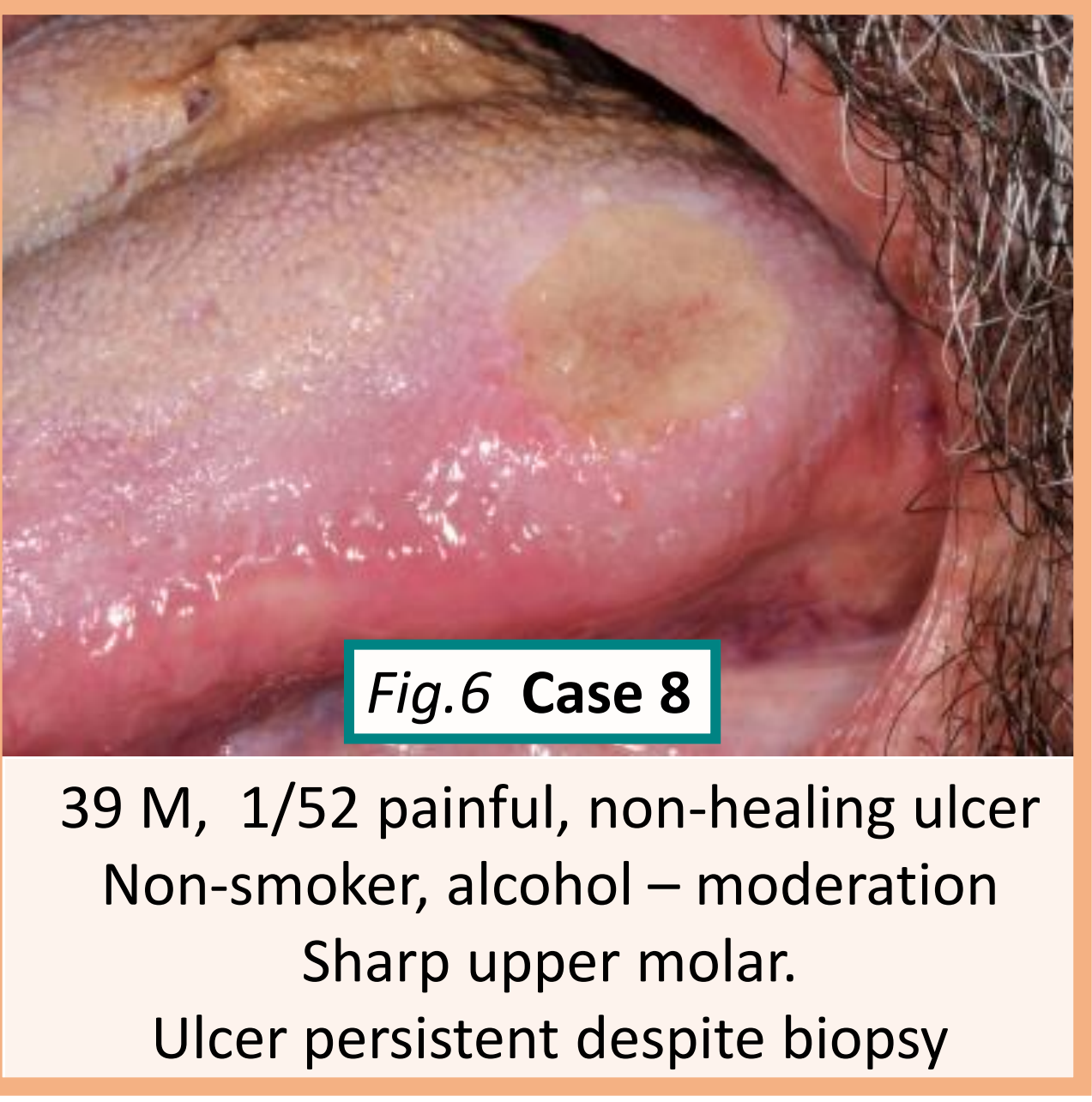


Fig.6 Case 8

39 M, 1/52 painful, non-healing ulcer
Non-smoker, alcohol – moderation
Sharp upper molar.
Ulcer persistent despite biopsy

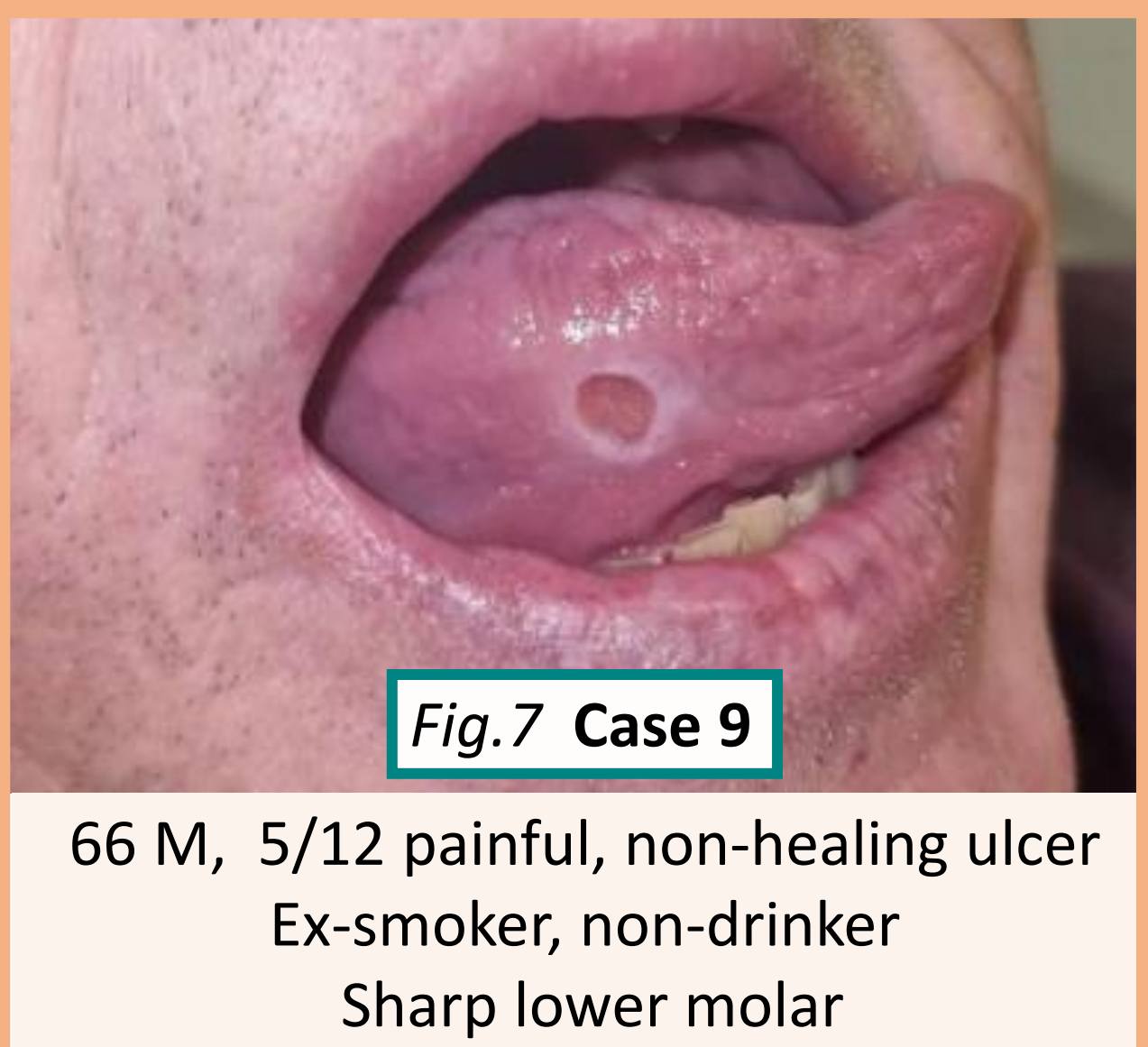


Fig.7 Case 9

66 M, 5/12 painful, non-healing ulcer
Ex-smoker, non-drinker
Sharp lower molar

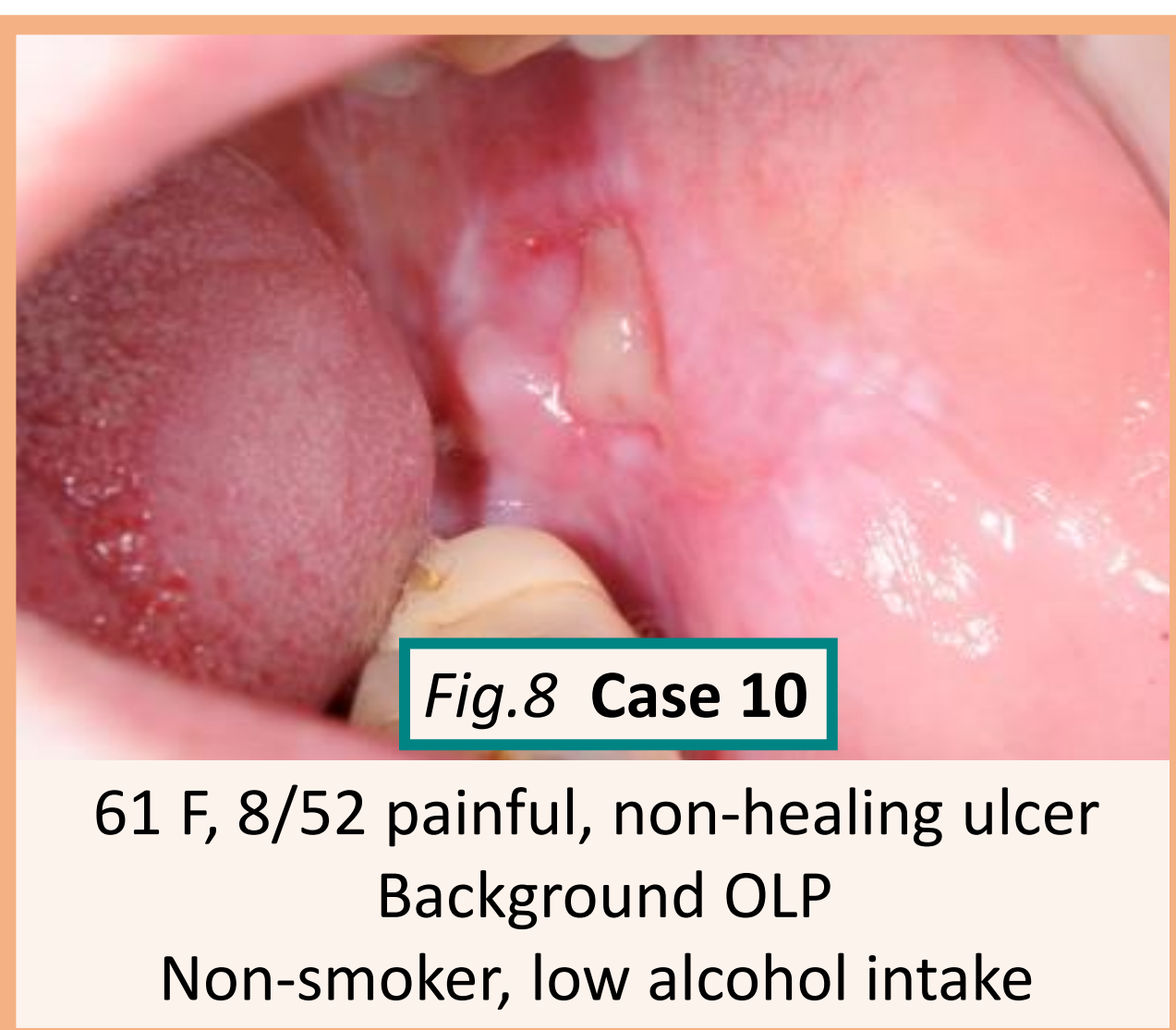
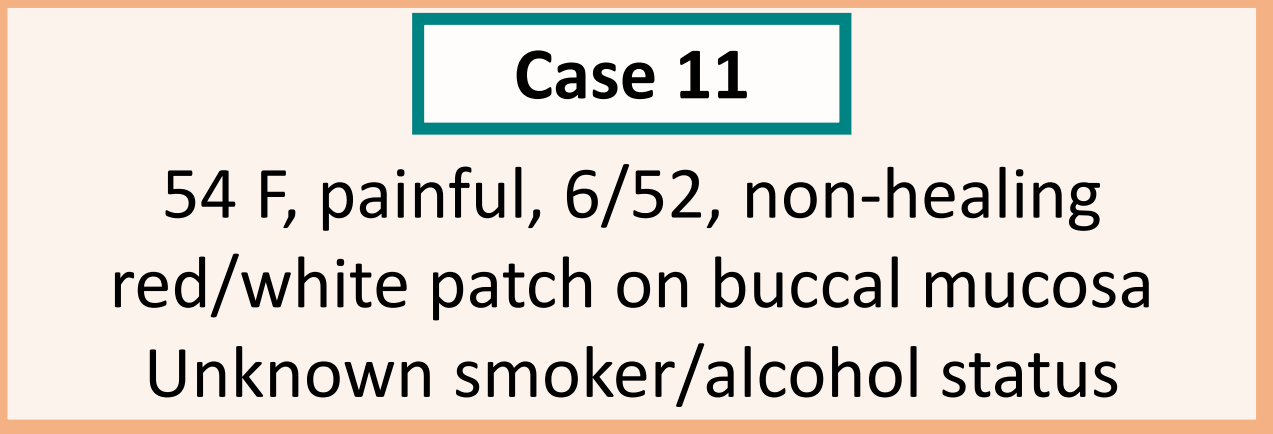


Fig.8 Case 10

61 F, 8/52 painful, non-healing ulcer
Background OLP
Non-smoker, low alcohol intake



Case 11

54 F, painful, 6/52, non-healing
red/white patch on buccal mucosa
Unknown smoker/alcohol status

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