TABLE 1 Scheme for Coding Chronic Pain Diagnoses based on AXES ¹⁶Axis Definition

- 1 Regions (eg, head, face, and mouth)
- 2 Systems (eg, nervous system)
- 3 Temporal characteristics of pain (eg, continuous, recurring irregularly, paroxysmal)
- 4 Patient's statement of intensity: time since onset of pain (eg, mild, medium, severe; 1 month or less; more than 6 months)
- 5 Etiology (eg, genetic, infective, psychological)

TABLE 2 IASP Regional Classification of Localized Syndromes of the Head and Neck¹⁶

Neuralgias of the head and face
Craniofacial pain of musculoskeletal origin
Lesions of the ear, nose, and oral cavity
Primary headache syndromes, vascular disorders, and cerebrospinal fluid syndromes
Pain of psychological origin in the head, face, and neck
Suboccipital and cervical musculoskeletal disorders
Visceral pain in the neck

TABLE 3 A Hierarchical International headache classification IHCD II ¹⁷ Part I: The Primary Headaches

- <u>1. Migraine</u>
- 2. Tension-type headache
- 3. Cluster headache and other trigeminal autonomic cephalalgias
- 4. Other primary headaches

Part II: The Secondary Headaches

- 5. Headache attributed to head and/or neck trauma
- 6. Headache attributed to cranial or cervical vascular disorder
- 7. Headache attributed to non-vascular intracranial disorder
- 8. Headache attributed to a substance or its withdrawal
- 9. Headache attributed to infection
- 10. Headache attributed to disorder of homoeostasis
- 11. Headache or facial pain attributed to disorder of cranium, neck, eyes, ears, nose, sinuses, teeth, mouth or other facial or cranial structures
- 12. Headache attributed to psychiatric disorder

Part III: Cranial Neuralgias Central and Primary Facial Pain and Other Headaches

- 13. Cranial neuralgias and central causes of facial pain
- 14. Other headache, cranial neuralgia, central or primary facial pain

Table 3 B Chapter 13 IHS Classification of cranial neuralgias and central causes of facial pain ¹⁷ (ICD-10 G44.847, G.44.848 or G44.8)

- 13.1. Trigeminal neuralgia
- 13.2. Glossopharyngeal neuralgia
- 13.3. Nervus intermedius neuralgia [G51.80]
- 13.4. Superior laryngeal neuralgia [G52.20]
- 13.5. Nasociliary neuralgia [G52.80]
- 13.6. Supraorbital neuralgia [G52.80]
- 13.7. Other terminal branch neuralgias [G52.80]
- 13.8. Occipital neuralgia [G52.80]
- 13.9. Neck-tongue syndrome
- 13.10. External compression headache
- 13.11. Cold-stimulus headache
- 13.12. Constant pain caused by compression, irritation or distortion of cranial nerves or upper cervical roots by structural lesions [G53.8] + [code to specify aetiology]
- 13.13. Optic neuritis [H46]
- 13.14. Ocular diabetic neuropathy [E10-E14]
- 13.15. Head or facial pain attributed to herpes zoster
- 13.16. Tolosa-Hunt syndrome 13.17. Ophthalmoplegic "migraine"
- 13.18. Central causes of facial pain

TABLE 3C Chapter 14. Other headache, cranial neuralgia, central or primary facial pain (ICD-10 R51)

- 14.1. Headache not elsewhere classified
- 14.2. Headache unspecified

TABLE 4 American Academy of Orofacial Pain classification. ¹⁸ Taxonomy is based on a mixture of regional, temporal and Axes.

Vascular and Nonvascular Intracranial Disorders
Primary Headache Disorders
Neurogenic pain disorders Episodic and Continuous Neuropathic Pain
PHN

Intraoral Pain Disorders
Temporomandibular Disorders
Cervicogenic Mechanisms of Orofacial Pain and Headaches
Extracranial and Systemic Causes of Head and Facial Pain
Axis II: Bio behavioural Considerations

Table 5 Temporomandibular Disorders RCD TMD ¹⁹

Temporomandibular disorders (TMDs) refers to three groups of conditions:

- 1. Myofascial pain (pain from the masticatory musculature):
 - with limited opening
 - without limited opening
- 2. Disc displacement (abnormal movement of the articular disc):
 - with reduction of the disc [clicking],
 - without reduction of the disc displacement:
 - with limited opening
 - without limited opening
- 3. Other joint disorders:
 - arthralgia (pain from the Temporomandibular joint),
 - osteoarthritis (painful crepitus)
 - osteoarthrosis (an osteoarthritis that is now quiescent)

Other pathology that can affect the Temporomandibular joint complex can include:

Tumours – either primary or secondary Rheumatoid arthritis Hyper or hypomobility

Table 6 Woda et al 2005classification for chronic orofacial pain adapted from ²⁰

Neurovascular tension	and	Neuralgia	Persistent idiopathic
Tension headache Migraine Cluster headache		Primary Trigeminal neuralgia (Classical and Non classical)	Stomatodynia/Burning mouth syndrome BMS
		Secondary neuropathy Post herpetic neuralgia Diabetes mellitus Multiple sclerosis	Persistent idiopathic PIFP (e.g. atypical facial pain)
		HIV Post traumatic neuropathy Lingual Inferior alveolar nerve injuries	Arthromyalgia

Table 7: Differential diagnoses of Acute inflammatory Orofacial pain 54

Condition	Prev	Location &	Frequency	Character/sev	Provoking factors	Associated factors
	M:F	radiation	and duration	erity		autonomic
	age					
Acute inflammatory				Responds to	Responds to	Caries = tooth decay
Dental structures				NSAIDS and	antibiotics if infection	
conditions				paracetamol	related	
Dentine sensitivity	Common	Well localised to	Elicited less	Sharp pain	Stimulus usually cold	Defects at dento-enamel junction
	1:1	a tooth at	than	`neuralgic'	or touching the	usually in association with abrasive
	>30yr	dento-enamel	seconds/minut	seconds	region les commonly.	lesions caused by inappropriate
		defect	es		heat.	tooth brushing technique
Cracked cusp	Fairly	Localized to a	Few seconds	Sharp pain that	Biting on the tooth.	Crack within the tooth. If extending
	common	tooth but can be	to a minute	may mimic	Biting on a cotton	to pulp the tooth has poor
	1:1	very difficult to	intermittent	neuralgia. and	wool roll on the affect	prognosis. This diagnosis must be
	>25yr	identify	dependant on	duration	tooth will induce pain	eliminated before considering
			vector of	depends on	and is a good	neuralgia.
			fracture	pulpal	diagnostic modality	
				involvement		
Pulpal (reversible	Very	Well localised to	Elicited and	Sharp, stabbing,	Cold or sweet foods	Immediate relief on removal of
pulpitis)-exposed dentine	common	a tooth	can last for	throbbing	provoke, it is rarely	stimulus
due to caries, defective	1:1		seconds to	seconds	spontaneous.	Cold foods/drinks or
restoration and dental			minutes			Caries in tooth
trauma						
Pulpal (irreversible)-	Common	Well -poorly	Elicited lasts	dull, throbbing	Heat and sugary	Often large restoration or caries.
chronic pulpitis	1:1	localized	minutes -	moderate to	foods rarely	Tooth is tender to percussion in later stages.
		intraorally	hours	severe minutes-	spontaneous	ace. stages.
				hours		
Periodontal – chronic	Common	Poorly localised,	Elicited by	Mild-severe,	Large carious lesions,	Affected tooth is tender to bite on
apical periodontitis	1:1	intraoral	biting on tooth	dull, throbbing	restorations, recent	or induced percussion. Late stages
=dental abscess	>kids or	Except on biting	and	hours	trauma	a gum swelling and or sinus may
	adults	on affected	spontaneous			be visible with bad taste related to
		tooth	Intermittent			discharge of pus
			minutes to			
			hours			
Gingivitis and periodontal	Common	Generalized or			Associated with poor	Inflammation of gums

disease are not painful	1:1	localised,			oral hygeine	Periodontitis (gum disease) does
	adult	intraoral				not occur in children uless related
						to systemic disease
Dry socket	Fairly	Well localized to	Post surgical	Constant	Touching or pressure	No localized signs of inflammation
Alveolar osteitis	common	extraction	extraction 3-	Throbbing,	on extraction socket	(no redness, swelling or
Approx 5% post dental	1:1	socket. Risk	10 days	severe		lymphadenopathy Observe
extractions	adults	factors	, Dull	Does not		unhealed socket with exposure of
Does not occur in children		Increased in	Continuous	respond to		bone.
		smokers		antibiotics		
		Steroids				
		Surgical				
		mandibular				
		extractions				
Pericoronitis	Common	Pain localized to	Continuous	Dull ache, which	Eating	With local spreading infection
20-25 years coinciding	1:1	a partially	but resolves	becomes	chewing around	trismus may occur. Local signs
with the eruption of	adults	erupted tooth	with good oral	throbbing as	affected tooth and	include soft tissue erythema,
mandibular third molar		most commonly	hygiene thus	condition	Mouth opening.	presence of operculum around
teeth		wisdom teeth.	providing	worsens.		affected tooth.
Associated with poor oral			remission			
hygiene						
Local orofacial						
structures						
inflammatory pain						
Mucosal lesions						
Recurrent Herpes labialis	Common	Usually crusted	Continuous	Tingling initially	Stress, sunlight,	Tendency to get cold sores due to
	1:1	or ulcerated	lasts for about	then sharp,	menstruation.	previous infection by herpes
	adults	lesion on upper	2 weeks	annoying and		simplex virus.
		or lower lip. May		tender		
		have vesicles in				
		the mouth.				
Recurrent oral ulceration	common1:	Localized to	Intermittent ,	Sharp, stabbing	Catching ulcer when	Difficulty in mouth movement and
	1	areas of	may last for	or throbbing	eating	eating. Crops of ulcers intra-orally
	adults	ulceration	hours,			
Lichen planus	Fairly	Pain localized to	Intermittentm	Sharp, stabbing	Spicy food or eating	Difficulty eating certain foods.
Secondary to drugs? If	common	areas of lesion	ay last for	or throbbing,	and chewing when	
<u> </u>	I	1	1	I	I	I .

Adults autoantibodies Adul	primary check	1:8	usually biltaerak	hours.	burning	severe.	
Other local structures mucosa months common common litra-auricular, adisorder Local structures Cenerol in termination intra-auricular, any last for common litra-auricular, any last for law seasoratic Plan intra-auricular, and law seasoratic Plan include continuous and Reactive arthritiss purishing, purishing purishing pathology or dysfunction with associated aduring movement Larthridides Rare OA, elenching, bruxism, or commonly or clicking indidicative of joint dependency or dysfunction and meniscal ericoronitis displacement during movement Maxillary sinusitis Lome of the properties and or adults the midfacial region with the midfacial region with maxillary teaching unlaterally or platerally o		adults	-	Sometimes no	_		
Temporomandibular disorder common intra-anciular, temporal, political structures of common intra-anciular, temporal, disorder common intra-anciular, temporal, disorder disorder archites and Reactive arthritise Rare archites partially enumbers of circking indicative of joint displacement during movement common and meniscal ericoronitis displacement during movement common and maniscal ericoronitis displacement during movement common	autoantibodies		Gums and cheek	pain for			
Temporomandibular disorder RDC TMD criteria 39 I 1:1 temporal, occipital, hours, may occipital, and Reactive arthritisp partially erupted tooth most patible growth of clicking indicative of joint distruction with associated crepitus and or clicking indicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common Agillary sinusitis Salivary gland disease Salivary gland disease Sialoary gland disease Sialoary gland disease Sialoary gland disease Race Marchitidispan occipital, intera-auricular, intera-auricular, intera-auricular, intera-auricular, may last for caching, actions or maxillary texth) unilateral or commontly common intra-auricular, intera-auricular, intera-auricular, intera-auricular, may last for caching, adaching, affecting unilateral or biblateral yor biblaterally or biblaterally or slick intera-auricular, intera-auricular, intera-auricular, may last for caching, adaching, actions and actions, accipital, hours, may unilateral or temporal region with the decrease of include or cacherosa of include a drinding, opening wide, chewing E Limitation/ deviation on opening (in II) and III) Tenderness in muscles of more occlusal factors (I,II and III) Tenderress in muscles of of dental support condition may be contributory (disc displacement) on rotational and or translational movements II TMD dysfunction with associated repitus and or clicking indicative of joint distruction and meniscal ericoronitis displacement during movement Common 1:1 display the proper in the			mucosa	months			
disorder Common Intra-auricular, temporal, 20-38yrs occipital, 1:1 temporal, 20-38yrs occipital, 2	Other local structures						
RDC TMD criteria 19	Temporomandibular	Fairly	Unilateral. TMJ,	Intermittent ,	Usually dull	Clenching and	Signs may include
I Arthritides Rare OA, Rheumatoid, Stills, Gout include include and Reactive arthritisP cleaning and reactive and arthritisP cleaning and arthritisP cleaning and or translational movements around affected (III) Open or closed locking with noturn. Maxillary sinusitis Common private arthritisP cleaning arthritisP cleaning and arthritisP cleaning and arthritisP c	disorder	common	intra-auricular,	may last for	aching.affecting	grinding, opening	Joint tenderness on palpation (I,II
I Arthritides Rare OA, Rheumatoid, Stills, Gout and Reactive arthritish pathology or dysfunction pathology or dysfunction with associated cricioking indicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Maxillary sinusitis Cambon 1:1 Arthritides Rare OA, Rheumatoid, Stills, Gout and Reactive arthritish pathology or dysfunction and meniscal ericoronitis displacement during movement Salivary gland disease Sialadenitis may be Salivary gland disease Sialadenitis may be II Arthromyalgia (cheching, bprusikin, oclaized to a partially erupted tooth most morning if throbbing as of dental support condition may be contributory associated or condition may be contributory associated or condition may be contributory and of dental support (disc displacement) on rotational and or translational movements and or clicking indicative of joint distruction and meniscal ericoronitis displacement during movement Salivary gland disease Sialadenitis may be II arthromyalgia Jum Commonly associated with nocturnal clenching / bruxism, wisdom teeth. Worse in morning if throbbing as condition with nocturnal clenching / bruxism, work tooth most tooth most tooth most tooth more interference or lack of dental support condition may be contributory ading or condition morning if throbbing as ocidated with nocturnal clenching / bruxism, on this support seating in for sedation for reduction (III) Open or closed locking with / tooth. Mouth opening. Trequiring indicative of joint daily clenching habit To prequiring hospital admission for sedation or requiring habit in the midden and or translational movements at requiring habit in the midden and or translational movements and or translational movements are likely tooth. To province ar	RDC TMD criteria 19	1:1	temporal,	hours, may	unilateral or	wide, chewing E	and III)
Rheumatoid, Stills, Gout and Reactive arthritisP clenching, bruxism, or commonly wisdom teeth associated crepitus and or discription and meniscal ericoronitis displacement during movement Maxillary sinusitis Maxillary sinusitis Common Agailary dand disease Sialwary gland		20-38yrs	occipital,	have severe	bilateral		Limitation/ deviation on opening
and Reactive arthritisP bruxism, bruxism, downwith no joint pathology or dysfunction with associated crepitus and or clicking indicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis	I Arthritides Rare OA,	risk factors	masseteric, Pain	exacerbations	temporal region	Some occlusal factors	(I,II and III)
Bruxism, gum commonly gum chewing gum chewing and hyperflexia sociated crepitus and or clicking indicative of joint during movement guring movement Maxillary sinusitis Example 4	Rheumatoid, Stills, Gout	include	localized to a	Continuous	Dull ache, which	for example	Tenderness in muscles of
IT Arthromyalgia Muscle pain with no joint pathology or dysfunction with and hyperflexia Pathology or dysfunction with hyperflexia Pathology or dysfunction P	and Reactive arthritisP	clenching,	partially erupted	Worse in	becomes	interference or lack	mastication. (II)
Muscle pain with no joint pathology or dysfunction and hyperflexia and hyperflexia and hyperflexia and hyperflexia and or clicking indicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common 1:1 adults the midfacial adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Linked to unilaterally or bilaterally Salivary gland disease Sialadenitis may be Linked to unilaterally or bilaterally Avith nocturnal clenching / bruxism, worsens. Worsens. Worsens. ating, or chewing around affected (III) Open or closed locking with/ tooth. Worse at night tooth. Woth opening. Aud of translational movements (III) Open or closed locking with/ tooth. Without reduction in severe cases Requiring hospital admission for sedation for reduction Crepitation suggests arthritis in Thij. (I) Trismus, soft tissue erythema, presence of operculum around affected tooth. Purulent secretions from nose, recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. Infections or allergic cheek. Facial asymmetry Palpable masses of parotid or		bruxism,	tooth most	morning if	throbbing as	of dental support	Clicking (III)
pathology or dysfunction hyperflexia associated crepitus and or clicking inidicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common 1:1 disconfort over adults he midfacial region with reagion with reagion with reagion with reagion with respiratory tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be III TMJ dysfunction with hyperflexia hyp	II Arthromyalgia	gum	commonly	associated	condition	may be contributory	(disc displacement) on rotational
hyperflexia hyperflexia bruxism, Worse at night associated crepitus and or clicking inidicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common 1:1 discomfort over adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Nyperflexia bruxism, Worse at night if associated with gum chewing, Worse at night if associated with gum chewing or daily clenching habit Dull ache, with a sense of upper fullness and respiratory tenderness in the overlying allergic reactions Tooth. Mouth opening. Worse on bending forwards Forwards Forwards Forwards Forwards Forwards Forwards Foreign body in antrum. Toothiout reduction in severe cases Mouth opening. Mouth opening. Worse on bending forwards Forwards Forwards Forwards Foreign body in antrum. Foreign body in antrum. Facial asymmetry Palpable masses of parotid or	Muscle pain with no joint	chewing	wisdom teeth.	with nocturnal	worsens.	ating, or chewing	and or translational movements
III TMJ dysfunction with associated crepitus and or clicking inidicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common 1:1 discomfort over adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Salivary gland disease Sialadenitis may be Mouth opening. Mouth opening. Mouth opening. Mouth opening. Mouth opening. Requiring hospital admission for sedation for reduction Crepitation suggests arthritis in TMJ. (I) Trismus, soft tissue erythema, presence of operculum around affected tooth. Morse on bending forwards Foreign body in antrum. Facial asymmetry Facial asymmetry Palpable masses of parotid or	pathology or dysfunction	and		clenching /		around affected	(III) Open or closed locking with/
associated crepitus and or clicking inidicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common 1:1 discomfort over adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be If associated with gum chewing or daily clenching habit If associated with gum chewing or daily clenching habit Dull ache, with a sense of forwards Sedation for reduction Crepitation suggests arthritis in TMJ. (I) Trismus, soft tissue erythema, presence of operculum around affected tooth. Purulent secretions from nose, recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. If obstructive disease Sedation for reduction Crepitation suggests arthritis in TMJ. (I) Trismus, soft tissue erythema, presence of operculum around affected tooth. Purulent secretions from nose, recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. Foreign body in antrum. Facial asymmetry Palpable masses of parotid or		hyperflexia		bruxism,		tooth.	without reduction in severe cases
clicking inidicative of joint distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common 1:1 discomfort over adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Microponitis displacement daily clenching habit with gum chewing or daily clenching habit with gum chewing or daily clenching habit Worse on bending forwards Forwards Common 1:1 discomfort over the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Worse on bending forwards Foreign body in antrum.	III TMJ dysfunction with			Worse at night		Mouth opening.	requiring hospital admission for
distruction and meniscal ericoronitis displacement during movement Maxillary sinusitis Common 1:1 discomfort over adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Sialadenitis may be Common 1:1 discomfort over the midfacial region with tenderness of the midfacial or bilaterally Common 1:1 discomfort over the midfacial region with tenderness of maxillary teeth) allergic reactions Common 1:1 discomfort over the midfacial region with tenderness of maxillary teeth) allergic reactions Common 1:1 discomfort over the midfacial region with tenderness in the overlying cheek. Com be dull If obstructive disease Facial asymmetry Purulent secretions from nose, recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. Facial asymmetry Particulary (1) Times, soft tissue erythema, presence of operculum around affected tooth. Worse on bending forwards Forwards Foreign body in antrum.	associated crepitus and or			if associated			sedation for reduction
ericoronitis displacement during movement Common 1:1 adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Linked to adaily clenching habit Dull ache, with a sense of forwards Foreign body in antrum. Trismus, soft tissue erythema, presence of operculum around affected tooth. Purulent secretions from nose, recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. Trismus, soft tissue erythema, presence of operculum around affected tooth. Purulent secretions from nose, recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. Trismus, soft tissue erythema, presence of operculum around affected tooth. Recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. Trismus, soft tissue erythema, presence of operculum around affected tooth. Solled end of the midfacial region with respiratory tenderness in the overlying cheek. Facial asymmetry Palpable masses of parotid or	clicking inidicative of joint			with gum			Crepitation suggests arthritis in
during movement Maxillary sinusitis Common 1:1 discomfort over adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Common 1:1 discomfort over discomfort over adults Rare Parotid glands Dull ache, with as ense of tlinked to a sense of the overlying cheek. Dull ache, with as ense of forwards Forwards Forwards Forwards Forwards Forwards Foreign body in antrum.	distruction and meniscal			chewing or			TMJ. (I)
Maxillary sinusitis Common 1:1 discomfort over adults the midfacial upper fullness and region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Common Pain or Continuous Linked to a sense of forwards foreign body in antrum. Facial asymmetry Palpable masses of parotid or	ericoronitis displacement			daily clenching			Trismus, soft tissue erythema,
Maxillary sinusitis Common 1:1 discomfort over adults the midfacial region with tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Continuous Linked to a sense of forwards Dull ache, with a sense on bending forwards Tenderness of upper fullness and tenderness in the overlying cheek. Intermittent Continuous Dull ache, with a sense on forwards Forwards Forwards Foreign body in antrum. Foreign body in antrum. Facial asymmetry Purulent secretions from nose, recent history of cold that cleared up and returned, rhinorrhoea, foreign body in antrum. Foreign body in antrum. Facial asymmetry Palpable masses of parotid or	during movement			habit			presence of operculum around
1:1 discomfort over adults the midfacial upper tenderness in tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be 1:1 discomfort over the discomfort over the midfacial upper fullness and tenderness in the overlying cheek. Linked to upper fullness and tenderness in the overlying cheek. Tespiratory tenderness in the overlying cheek.							affected tooth.
adults the midfacial region with respiratory tenderness in tenderness in tenderness of maxillary teeth) unilaterally or bilaterally Salivary gland disease Sialadenitis may be Sialadenitis may be Region with respiratory tenderness in the overlying cheek. Intermittent can be dull region body in antrum. Fullness and tenderness in the overlying cheek. Intermittent can be dull region body in antrum. Salivary gland disease Rare Parotid glands Intermittent can be dull pain is worse on pain is worse on Palpable masses of parotid or	Maxillary sinusitis	Common	Pain or	Continuous	Dull ache, with	Worse on bending	Purulent secretions from nose,
region with tenderness of infections or allergic cheek. Salivary gland disease Sialadenitis may be Region with tenderness of infections or allergic cheek. Region with tenderness in the overlying cheek.		1:1	discomfort over	Linked to	a sense of	forwards	recent history of cold that cleared
tenderness of maxillary teeth) allergic cheek. Salivary gland disease Sialadenitis may be tenderness of maxillary teeth) allergic reactions the overlying cheek. Cheek. Can be dull If obstructive disease Facial asymmetry Palpable masses of parotid or		adults	the midfacial	upper	fullness and		up and returned, rhinorrhoea,
maxillary teeth) allergic cheek. unilaterally or bilaterally Salivary gland disease Rare Parotid glands Intermittent Can be dull If obstructive disease Facial asymmetry Sialadenitis may be 1:1 Or Meal time constant or pain is worse on Palpable masses of parotid or			region with	respiratory	tenderness in		foreign body in antrum.
unilaterally or bilaterally Salivary gland disease Sialadenitis may be Rare 1:1 Or Reactions Can be dull If obstructive disease Pacial asymmetry pain is worse on Palpable masses of parotid or			tenderness of	infections or	the overlying		
bilaterally bilaterally Can be dull If obstructive disease Facial asymmetry Sialadenitis may be 1:1 Or Meal time constant or pain is worse on Palpable masses of parotid or			maxillary teeth)	allergic	cheek.		
Salivary gland disease Rare Parotid glands Intermittent Can be dull If obstructive disease Facial asymmetry Sialadenitis may be 1:1 Or Meal time constant or pain is worse on Palpable masses of parotid or			unilaterally or	reactions			
Sialadenitis may be 1:1 Or Meal time constant or pain is worse on Palpable masses of parotid or			bilaterally				
	Salivary gland disease	Rare	Parotid glands	Intermittent	Can be dull	If obstructive disease	Facial asymmetry
associated with adults submandibular syndrome intermittent salivation at meal submandibular glands	Sialadenitis may be	1:1	Or	Meal time	constant or	pain is worse on	Palpable masses of parotid or
	associated with	adults	submandibular	syndrome	intermittent	salivation at meal	submandibular glands

obstructive disease		glands (bi or	swelling and	with intense	times	Palpable calculi in Stensons or
(calculi and or infection)		unilateral)	pain at meal	short episodes		Whartons ducts or blockage or
Or viral disease		Neoplasia may	times	on salivation		discharge from ducts
		be blocking duct				Exclude Sjogrens disease
Tonsillar	Rare	Mouth / throat	Spontaneous	Intermittent	Immune suppression	
	8-34 yrs		lasting weeks	episodes		
Ear infections	kids	auricular	Spontaneous	Intermittent		
Otitis media			lasting weeks	episodes		
Referred pain	Older					
Cervicogenic C2 C3	patients	Lateral face	Intermittent	Dull constant	Head move	Headaches
Cardiac		Left face		Intense	stress	Previous MI, angina

Table 8 Chronic Orofacial pain differential diagnosis 55

Chronic OFP	Prev.	Major location	Timing	Character/sev	Provoking factors	Associated factors
Neurological Conditions		& radiation		erity		
Primary neuropathy	Very rare	Demonstrable	Spontaneous	Sudden onset	Mechanical / thermal	Previous Ca
Due to	1:1	neuropathy	Constant	may be pain	allodynia and or	Older age
Neoplasia benign or	>50 yrs		worsening	dysaesthesia.	hyperalgesia	Smoking history
malignant				Paraesthesia,		Alcoholism
Central or peripheral				anaesthesia or a		Weight loss
lesions				combination		Night sweats
Secondary neuropathy	1:1	Diabetes	After onset of	Can be of 2	Stress, tiredness	Functonal difficulties
Many conditions can cause	>50 yrs	Viruses (HIV, herpes)	disease or	types	If elicited mechanical	Psychological impact
peripheral sensory neuropathies that may		Chemotherapy	post	Constant dull	andor cold allodynia	
present with pain,14 these		Muliple Sclerosis Parkinson's	trauma/infecti	moderate pain		
include;		Malignancy	on	Intermittent		
		Drugs - Growth Hormone		elicited		
		injections Nutritional		neuralgic pain		
Post traumatic neuropathy	Fairly	Any area related	Post surgical	Burning and or	Stimuli of wide	History of extraction of impacted
^{54, 56, 57} usually iatrogenic	common	to previous	intervention or	neuralgic	variety of functional	teeth, LA, implants, endodontics,
70% have neuropathic	1:1	surgery	LA injection	(mechanical	related pain (touch,	facial fractures, orthognathic
pain	>50 yrs	Demonstrable	Continuous	/thermal	cold air, certain	surgery
Mostly caused by third		neuropathy	variable	allodynia and	foods, kissing,	
molar surgery, local			intensity	hyperalgesia)	eating, application	
anaesthetics, implants and			paraesthesia,		makeup, shaving,	
root canal therapy			dysthaesthesia		tooth brushing.	
Postherpetic neuralgia 58	Rare	Commonly first	Continuous	Burning,	Tactile allodynia	More than 6/12 after acute herpes
If treated acutely with	>50 years	division of	pain	tearing, itching		zoster. Cutaneous scarring
high dose antiviral,	increased	trigeminal		dysaesthesias.		Exclude immune suppression
steroids and tricyclic	prev	(ophthalmic).		Moderate.		
antidepressants PHN will		unilateral				
be reduced						
Trigeminal neuralgia 59-61	Rare	Intra or	Each episode	Sharp shooting,	Light touch provoked	Discrete trigger zones, relief of pain
Primary no known cause	patient>50	extraoral in	of pain lasts	stabbing,	e.g. eating, washing,	at night. Mild flushing may be
Secondary associated with	yrs	trigeminal	for a seconds	electric shock	talking	noted during paroxysms.
vascular compromise,MS	2:1	region. Usually	to minutes	like pain which		If patient <50 yrs exclude MS

62		unilateral and	refractory	is moderate to	Avoidance behavior	MRI scan exclude central lesions,
(classical/typical refers to		V1 or V2	periods and	very severe	sleep unaffected	demyelination and vascular
clinical features) * 2			long periods of	,	'	compromise of Vth cranial nerve
			no pain			
Non classical /Atypical	Rare	Intraoral or	Sharp attacks	Sharp, shooting	Light touch provoked	May have small or no trigger
clinical features trigeminal	> 50yrs	extraoral in	for seconds to	moderate to	but continuous type	areas, variable pattern
neuralgia * 60	2 30y13	trigeminal	minutes, may	severe but also	pain not so clearly	MRI see above
neuraigia			have	dull, burning	provoked	Pilkt see above
		region			provokeu	
			persistent or	continuous mild		
			constant	background pain		
			background			
			pain with little			
			remission			
Glossopharyngeal	Very rare	Intraoral in	Each episode	Sharp, stabbing,	Swallowing or	Cardiac arrythmias or syncope may
neuralgia ⁶³		distribution of	last for	severe	ingestion of cold or	occur in some cases.
		glossopharynge	seconds to 2		acid fliuds	
		al. May radiate	mins,			
		to ear.				
Burning mouth syndrome	5-11% >	Tip and lateral	Continuous	Burning, tender,	Dry mouth, spicy	Altered taste, denture intolerance
55,64	60yr	borders of	May fluctuate	annoying, tiring	foods.hot foods	
	Females	tongue. Also		nagging pain.		
		other mucosa		Varies in		
		may be involved		intensity.		
Chronic OFP						
Neurovasculari						
Conditions						
Giant cell arteritis 65	Rare	May be bilateral	Continuous,	Aching,	Chewing	Jaw claudication, neck pain,
	>50	mostly over	new sudden	throbbing,		anorexia, visual symptoms, age
	4:1	temporal areas	onset	boring, sharp,		systemic symptoms, decreased
		scalp		moderate/		pulse in temporal artery
		tenderness		severe		
Chronic tension headache	Common	Usually bilateral	Continuous.	Dull aching head	Muscle tension and	Mild ache which becomes more
66	1:2	over frontal,	Daily for at	pain	stress. Anxiety,	intense and chronic. Fluctuates
	>30 yrs	orbital, fronto-	least 15 days	symmetrical and	depression	during the day. Little nausea or
		occipital,	a month	frequently		vomiting. Tight band like pain,
	1	J	l	l	l	

		occipital or whole scalp area.		global.		pressing, mild/moderate
Migraine with and without aura.67-68	Common 1:3 10-50	Unilateral with pain beginning in fronto-temporal area within 60 mins of aura	Continuous from 2 hours to one or two days. Less frequent	Throbbing, pulsating pain in attacks. Moderate/ severe	Stress, anxiety, dietary (cheese, chocolates), flashing lights, weather changes physical activity.	Aura - visual disturbance. Nausea vomiting, photophobia, better on lying down, numbness or weakness in mouth and hands.
Trigeminal autonomic cephalgias ⁶⁹						
Cluster headache ⁶⁹ Episodic pain free periods Chronic no remissions	Rare 5:1 20-40 yrs	Ocular, frontal and temporal areas.	15 –180 minutes to several hours, from 1 every other day to 8/day	Hot, searing, punctate, very severe	Vasodilators e.g. alcohol during the bout. Stress. GTN, Exercise Relieved drinking water and	Conjunctival injection, lacrimation, nasal congestion, rhinorrhoea, sweating, miosis, ptosis, eyelid oedema,. No nausea Seasonal spring / autumn (weeks to months) Remissions last 6-18 months.
Chronic paroxysmal hemicrania ⁷⁰	Very rare 1:2 30yrs	Ocular, frontal and temporal areas. Unilateral	Pain lasts 2-30 mins, 5-10 daily	Stabbing, throbbing, boring	Head movements Responds to indomethecin	Autonomic symptoms as for SUNCT
SUNCT ⁷⁰ Short lasting,unilateral neuralgiform , conjuntival injection and tearing	Very rare 2:1 40-70 V1 and V2	Ocular, periocular but may radiate to frontotemporal area, upper jaw and palate	Each episode last up to 2mins. Intermittent, several attacks a day and then may remit.	Burning, electrical, stabbing, severe	Neck movements Cutaneous stim mechanical allodynia	Conjunctival injection, lacrimation, nasal stuffiness, rhinorhea and facial flushing
SUNA ⁷⁰ Short-lasting, unilateral neuralgiform headache attacks with autonomic symptoms	Very rare 2:1 40-70 V1 and V2	See above	See above	See above	See above	Conjunctival injection, lacrimation, nasal stuffiness, rhinorhea and facial flushing with scalp sensitivity

Chronic OFP						
Idiopathic						
Chronic idiopathic oro-	Fairly	Poorly localized	Continuous >	Nagging, aching	Stress, fatigue	Other idiopathic pain disorders and
facial pain 71-73	common	and presents	2 years	Non compliant	Associated pan	somatic symptoms e.g. chronic
> 40 years	1:8	both intra and	No fluctuation	with	chronic pain	widespread pain, irritable bowel
Female	>40 yrs	extra-orally and	No response	neurological	conditions Fibro	syndrome, chronic fatigue.
+/- precipitative		variants like	to multiple	boundaries	myalgia	Psychosocial factors – anxiety,
event		atypical	medication			depression, adverse life events.
		odontalgia may				
		be localized to				
		specific teeth/				
		tooth				
Atypical odontalgia 74,75	Rare	Precisely	Continuous >	Nagging, aching	Stress and tiredness	Previous surgical or dental event
Persistent dentoalveolar	1:2	localized in	2 years	No neuropathic		Multiple interventions may have
pain (PDAP)	>40 yrs	tooth socket	No fluctuation	zone		provided temporary relief for weeks
Increasing belief that this			No response	Neuralgic or		months then the pain returns
is post traumatic			to multiple	burning		
neuropathic pain			medication			