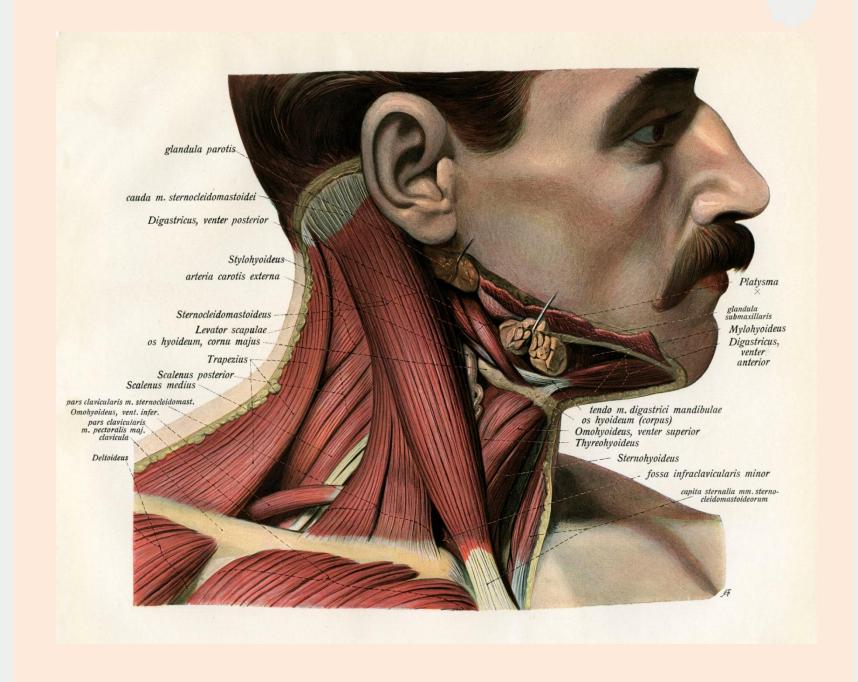


## Management of Infection

day one dentist to competent, confident practitioner



#### N IRELAND DENTAL CORETRAINE INJUCTION

22<sup>nd</sup> September 2025

Mr David Johnston

OMFS

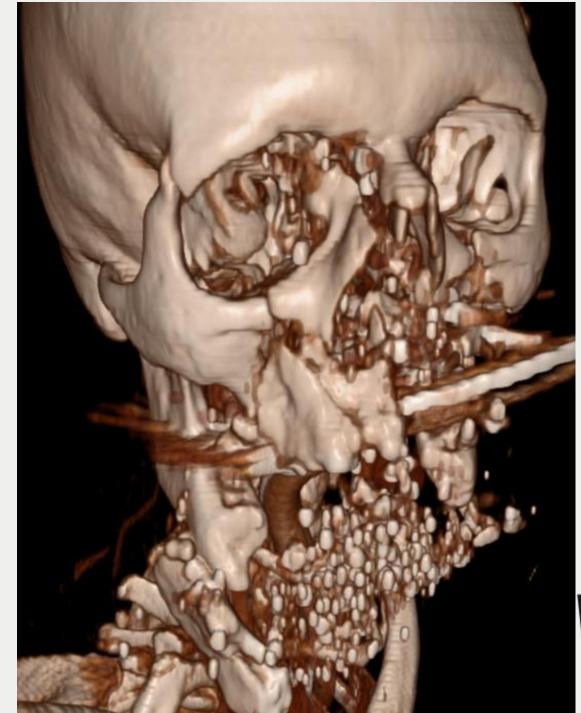


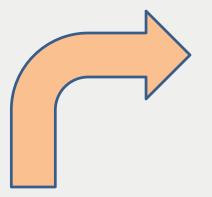
- head and neck cancer
- facial trauma
- salivary gland diseases
- facial disproportion
- facial pain
- temporomandibul ar joint disorders
- impacted teeth, cysts and tumours of the jaws
- problems

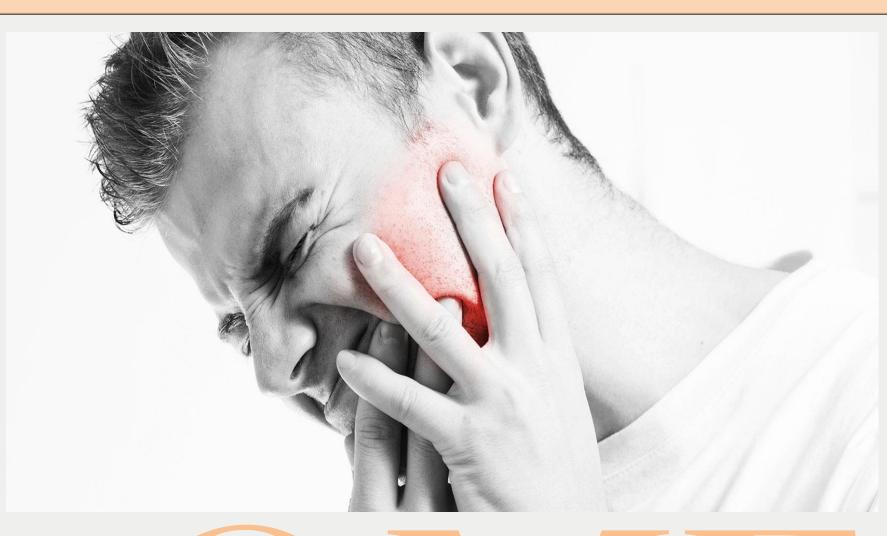
   affecting the oral mucosa such as mouth ulcers and infections

## SCOPE of









## WHO () 1\/L WE ARE?



# LET'S WORK TOGETHER

"Bridge between medicine and dentistry"





# BUILD KEY KNOWLEIGE.

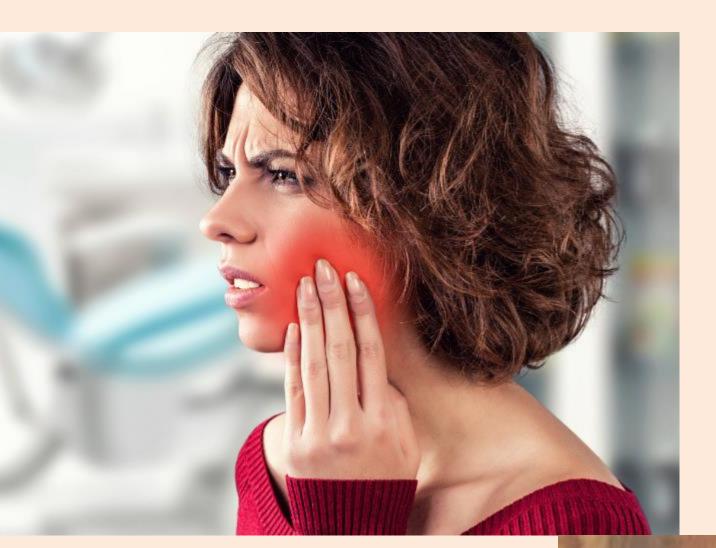
- Identify acute cervicofacial infection
- Appreciate the importance of triage and when to refer
- Increased confidence with initial management of head and neck infection

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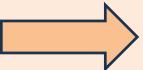


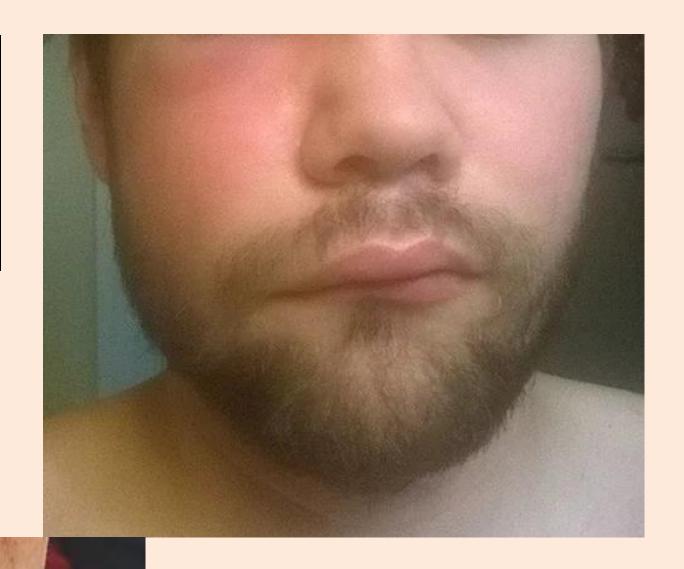
#### Range of presentations to dental practice/A&E





Broad range of presentations from monotonous to the extreme

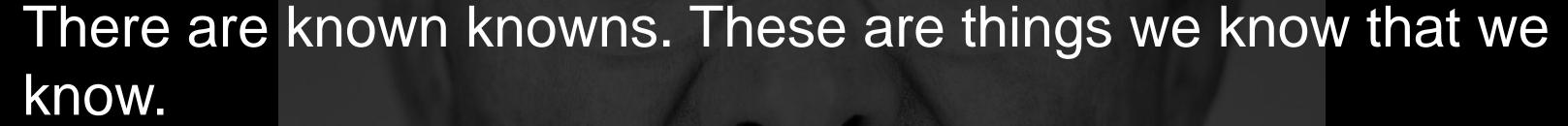




\*ASSESSMENT
\*TRIAGE
\*MANAGEMENT





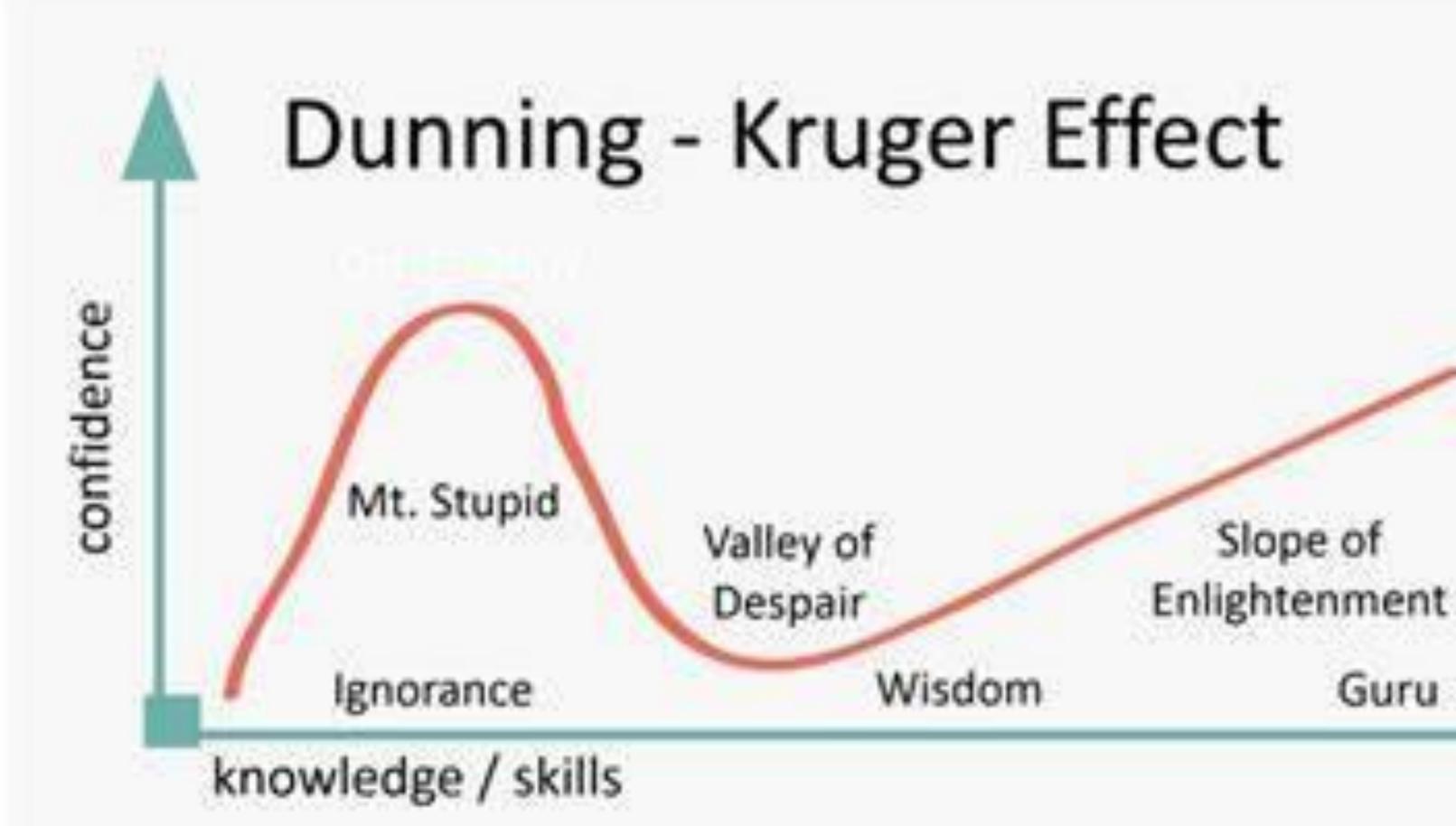


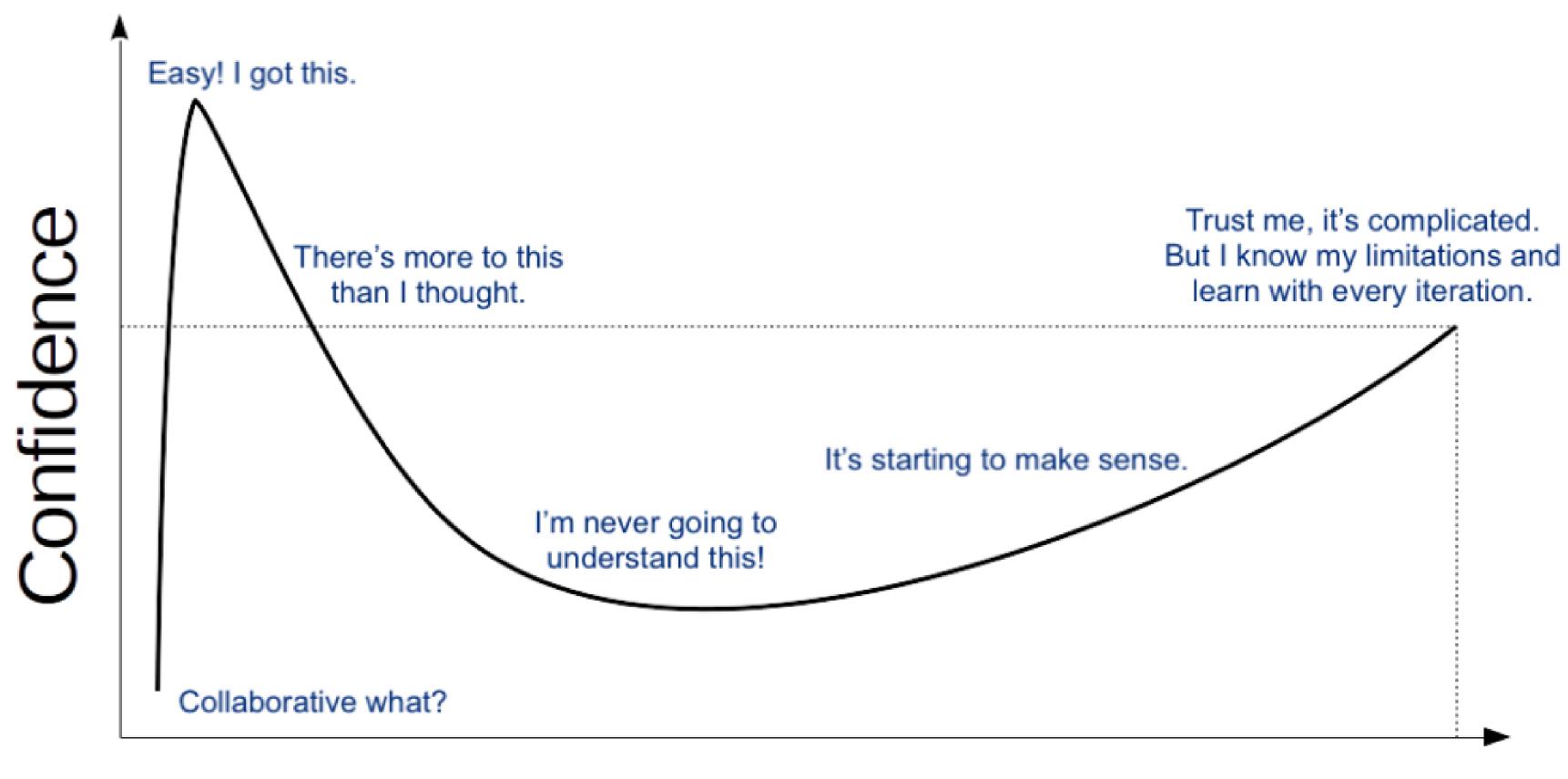
There are known unknowns. That is to say, there are things that we know we don't know.

But there are also UNKNOWN UNKNOWN

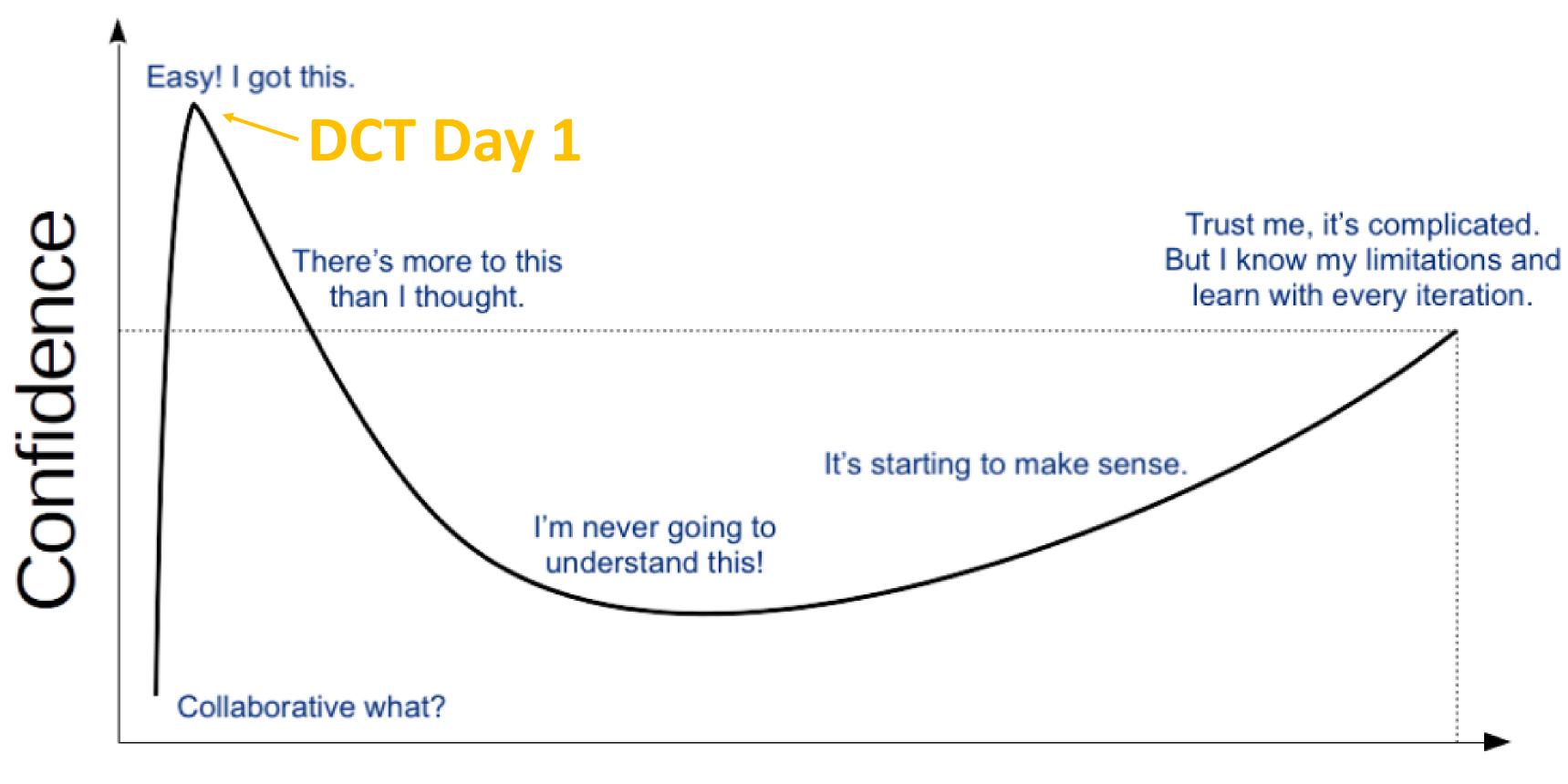
. . . these are things we don't know we don't know.

**Donald Rumsfeld** 





Knowledge



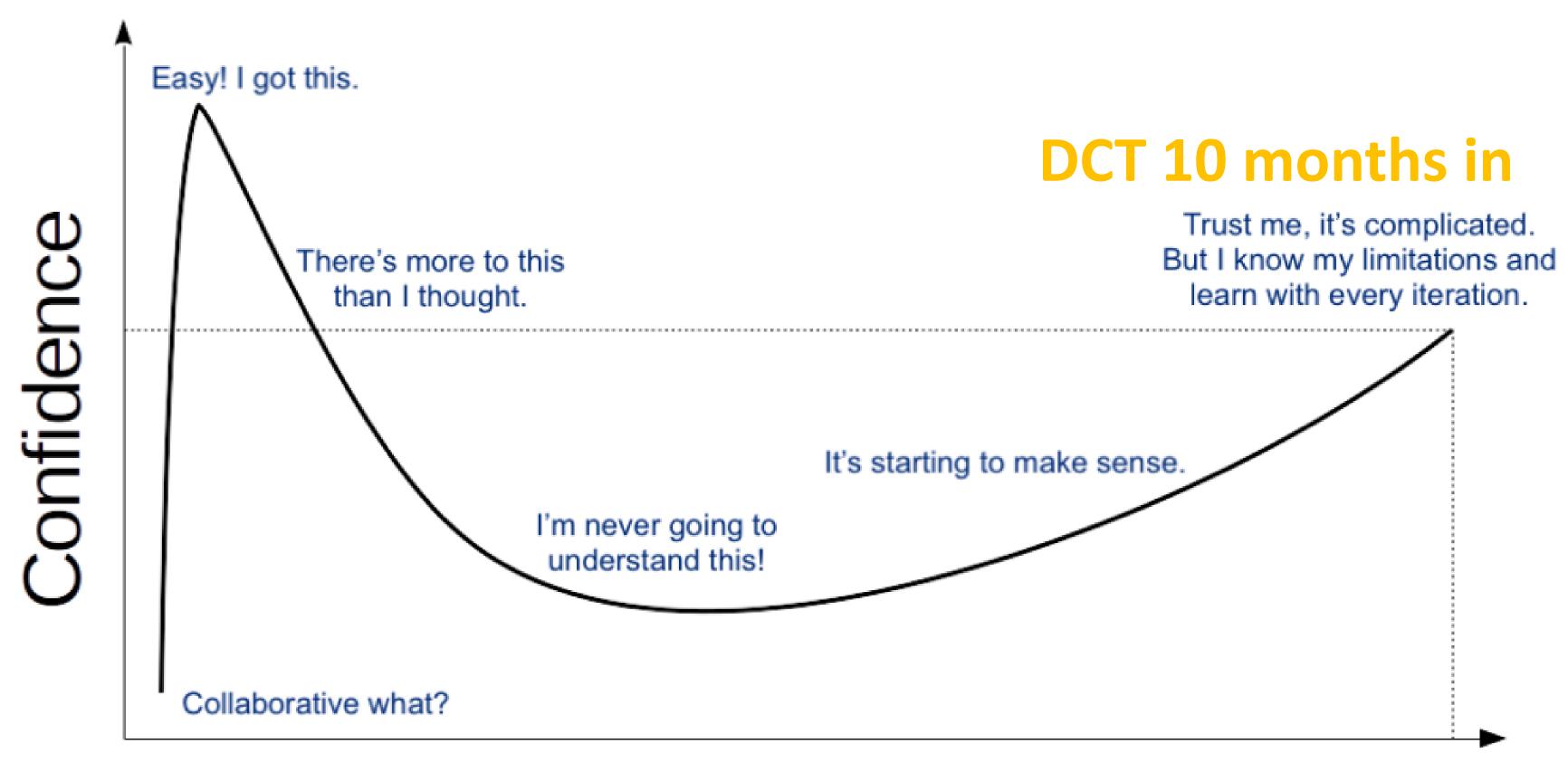
Knowledge



Knowledge



Knowledge



Knowledge



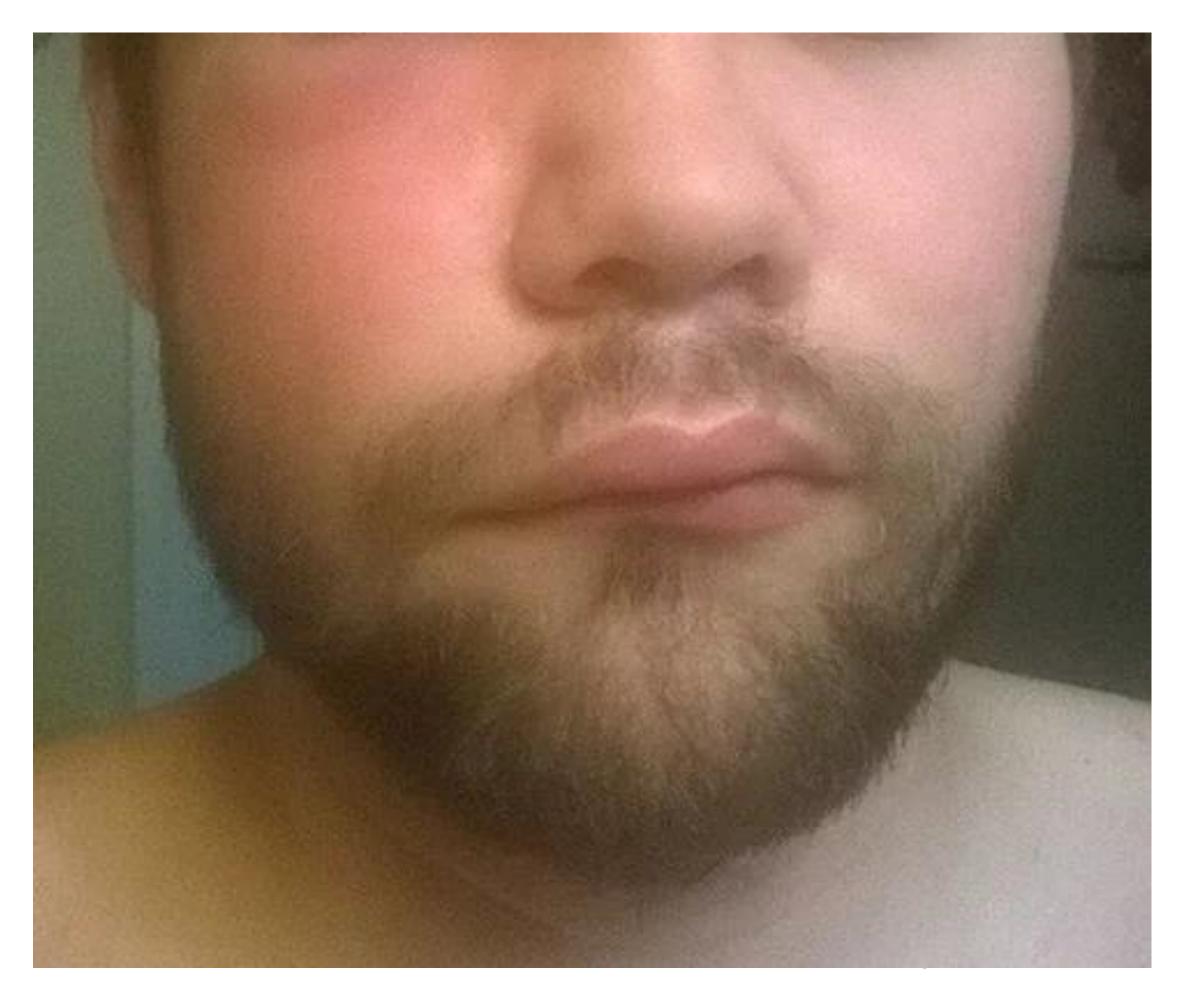
## CASE 1

21yo MALE

Attends GDP

Moderate facial swelling over 2 days
Pain from 'broken tooth' UR6



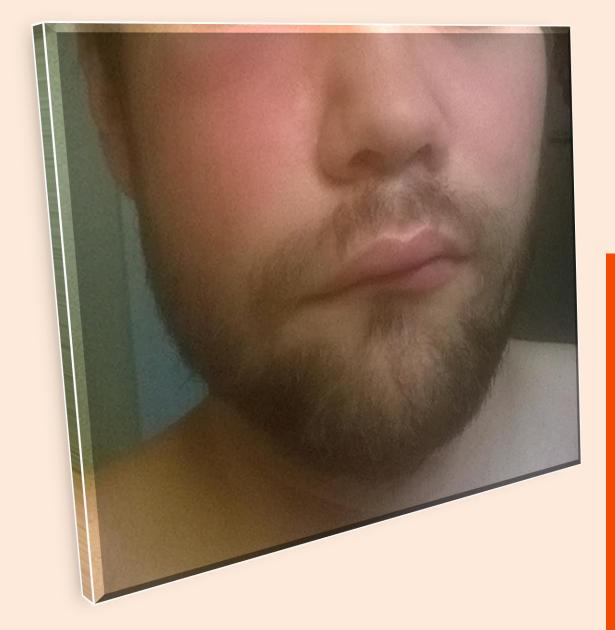


## FEEDBACK

## LEARNING



## CASE 1



**BACK TO BASICS** 

MICROBIOLOGY



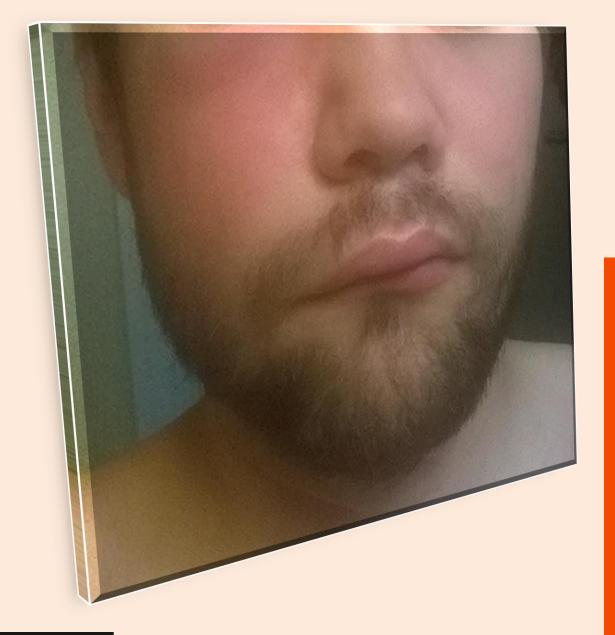
#### ABSCESS

Alocalised collection of pus with in the alveolar bone of the jaws, most often caused by extension of infection from an adjacent non-vital tooth

MIXED bacterial infection



## CASE 1



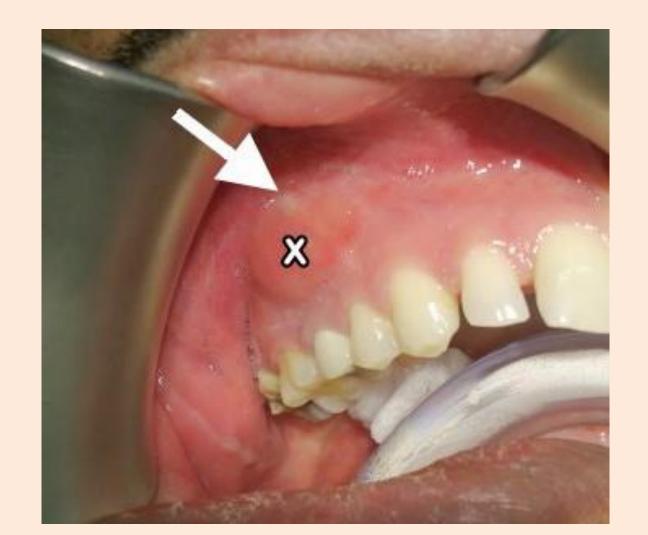
**BACK TO BASICS** 

MICROBIOLOGY



## urban myths 101

- Giving local anaesthetic doesn't spread infection, it has ALREADY spread
- LA doesn't work when infection/abscess is present, its efficacy is not postcode related
- Antimicrobials as a sole modality DO NOT treat odontogenic infection





#### REMOVE SOURCE OF INFECTION



Management:

Decompress pulp chamber

Or

Extract tooth



+- Incision and Drainage of abscess



## CASE 2



58 yo MALE Phonecall from A&E Triage

"His dentist has sent him in can you see him, he has a dental abscess."

## BIGROUND

## FEEDBACK

## LEARNING

## CAN YOU SEE

### HIM?

## ...NO

- Cervicofacial infection potentially life threatening, manage as any other unwell patient
- SEPSIS 6
- Multi specialty approach



**OBSERVATIONS** 

**BLOODS** 

**IMAGING** 

SUBJECTIVE AND OBJECTIVE ASSESSMENT

Initial management of infection as an OMFS DCT

Definitive surgical management of infection

# IMOW THE WITH







## 01 ASSESSMENT.

- Assess the patient with acute cervicofacial infection
- Be able to competently triage patients with infection
- Develop a range of treatment modalities to manage an acute dental abscess
- Be able to refer and signpost patients to OMFS/specialist practice
- Initial management of infection as an OMFS DCT

C 2.2.3	Prevent, diagnose, and manage patient pain appropriately, effectively, and safely	
C 2.2.4	Safely and appropriately prescribe and administer medicines and therapeutic agents	
C 2.2.5	Monitor and review treatment outcomes and patient response to advice, providing aftercare, follow-up and ongoing preventive advice and intervention	
Safe Clinical Environment		
C 2.3.1	Identify and explain the risks within and around the clinical environment and manage these in a safe and effective manner	
C 2.3.2	Implement, perform, and manage effective decontamination and infection control procedures according to current guidelines	
Acute Conditions		
C 2.4.1	Identify, assess, and manage medical emergencies	
C 2.4.2	Diagnose and manage patients' acute oro-facial and dental pain	
C 2.4.3	Diagnose and manage acute dento-alveolar and mucosal infection	

Learning Outcomes		
C 2.1.1	Obtain, record, and interpret a comprehensive and contemporaneous patient history, taking into account social and/or cultural sensitivities	
C 2.1.2	Undertake an appropriate systematic intra- and extra-oral clinical examination	
C 2.1.3	Assess patients' levels of anxiety, experience, and expectations in respect of dental care and oral health	
C 2.1.4	Appropriately prescribe and/or interpret the findings of clinical and laboratory investigations	
C 2.1.5	Undertake relevant special investigations and diagnostic procedures, including radiography	
C 2.1.6	Undertake an orthodontic assessment	
C 2.1.7	Synthesise the full results of the patient's assessment and make clinical judgements taking into account patient compliance, values, cultural identity, and self-care	
<del>C 2.1.8</del>	Formulate a differential diagnosis or diagnoses and from there a definitive diagnosis	



## 02 TRIAGE.

- Assess the patient with acute cervicofacial infection
- Be able to competently triage patients with infection
- Develop a range of treatment modalities to manage an acute dental abscess
- Be able to refer and signpost patients to OMFS/specialist practice
- Initial management of infection as an OMFS DCT

	laboratory investigations
C 2.1.5	Undertake relevant special investigations and diagnostic procedures, including radiography
C 2.1.6	Undertake an orthodontic assessment
C 2.1.7	Synthesise the full results of the patient's assessment and make clinical judgements taking into account patient compliance, values, cultural identity, and self-care
C 2.1.8	Formulate a differential diagnosis or diagnoses and from there a definitive diagnosis
C 2.1.9	Formulate a personalised treatment plan, synthesising patient assessment, diagnostic data, prognosis, and shared decision making
C 2.1.10	Obtain valid consent from patients explaining all the relevant factors and taking into account the legal requirements
<del>C 2.1.11</del>	Assess own capabilities and limitations and refer patients for specialist treatment or advice when and where appropriate

Sub domain:	Insight
Behaviours	
S (B)1	Accurately assess your own capabilities and limitations in the interest of high-quality patient care and seek advice from supervisors or colleagues where appropriate
S (B)2	Recognise personal assumptions, biases and prejudices and manage the impact of these on patient care and professional behaviour with colleagues, patients and wider society
S (B)3	Recognise the impact of contextual factors on the health care environment and patient safety and manage this professionally
Learning Outcomes	
8 1.1	Explain what is meant by the term insight in the context of professional practice
S 1.2	Explain why insight is important in ensuring safe and effective patient care, and to personal development



# O3 CLICAL MANAGEMENT.

- Assess the patient with acute cervicofacial infection
- Be able to competently triage patients with infection
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omain:	Clinical Knowledge and Skills		
ard & Soft Tissue Disease			
2.7.1	Undertake non-specialist oral surgery of hard and soft tissues		
2.7.2	Extract erupted teeth and roots in the permanent and primary dentition		
2.7.3	Diagnose and manage unerupted teeth and retained roots		
estoration	and/or Replacement of Teeth		
2.8.1	Assess and manage caries		
2.8.2	Assess and manage occlusion		
2.8.3	Assess and manage tooth wear		
2.8.4	Assess and manage temporomandibular joint disorders		
2.8.5	Create an oral environment where restoration or replacement of the tooth is viable		
2.8.6	Where appropriate, restore the dentition using the principle of minimal		

Safe Clinical Environment		
C 2.3.1	Identify and explain the risks within and around the clinical environment and manage these in a safe and effective manner	
C 2.3.2	Implement, perform, and manage effective decontamination and infection control procedures according to current guidelines	
Acute Conditions		
C 2.4.1	Identify, assess, and manage medical emergencies	
C 2.4.2	Diagnose and manage patients' acute oro-facial and dental pain	
C 2.4.3	Diagnose and manage acute dento-alveolar and mucosal infection	
C 2.4.4	Diagnose and manage dento-alveolar and mucosal trauma	
Oral Health/Prevention		



### 04 REFERAL.

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- Be able to competently triage patients with infection
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C 2.1.10	Obtain valid consent from patients explaining all the relevant factors and taking into account the legal requirements	
C 2.1.11	Assess own capabilities and limitations and refer patients for specialist treatment or advice when and where appropriate	
P 3.8	Describe the considerations of the management of resources in provision of care decisions including appropriate use of primary and secondary care networks	
P 3.9	Describe the importance of collaboration across the health and social care sector for the benefit of communities and individual patients	
Sub domain:	Insight	
Behaviours		
<del>S</del> (B)1	Accurately assess your own capabilities and limitations in the interest of high-quality patient care and seek advice from supervisors or colleagues where appropriate	

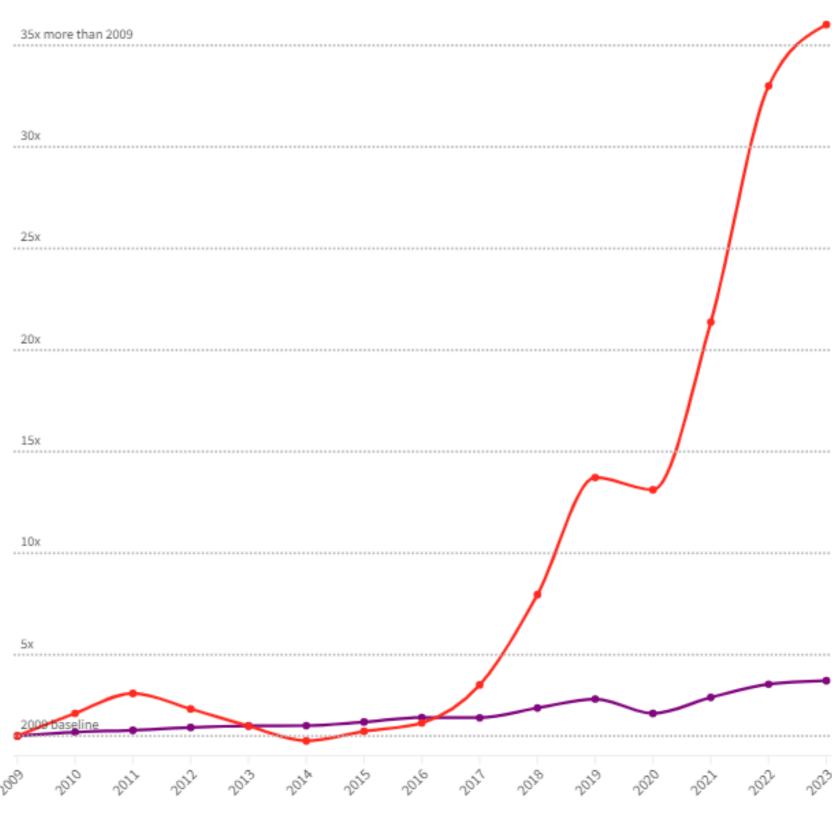
Sub domain:	Insight	
Behaviours		
S (B)1	Accurately assess your own capabilities and limitations in the interest of high-quality patient care and seek advice from supervisors or colleagues where appropriate	
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Learning Outcomes		
81.1	Explain what is meant by the term insight in the context of professional practice	
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#### Northern Ireland: extreme A&E waits now 36x higher than 2009

And four-hour waits are up nearly four-fold

4-hour waits 📒 12-hour waits



Source: FactCheck analysis, Northern Ireland Department of Health

Average A&E monthly attendances by year, indexed to 2009. 'Extreme waits' defined as +12 hours from arrival to treatment, discharge or admission. Figures for 2023 go up to September.

2023/2024 **758,645** attendances at A&E

(population 1.9 million <sup>2021</sup>)

## wait > 5 hours

= increased chance of coming to harm

Royal College of Emergency Medicine

Patients who meet these criteria should attend an Emergency Department: oral bleeding that the patient or carer is unable to control with self-care measures mouth or face swelling that gets worse over a period of a few hours mouth or face swelling that affects the ability to swallow or open the mouth mouth face or swelling that is affecting your vision serious dental trauma - physical injury to the mouth



# 05 OMFS HOSPITAL MAANAGEMENT.

DCT AND BEYOND

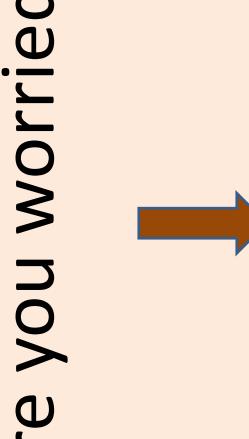
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<del>C 2.1.8</del>	Formulate a differential diagnosis or diagnoses and from there a definitive diagnosis	

# Are you worried?

## OMFS DCT



### SBAR

- \*Situation
- \*Background
- \*Assessment
- \*Recommendation



**DCT** Assessment

Form accurate diagnosis and triage

Phone for help

Admit patient

Phone theatre and speak to anaesthetics

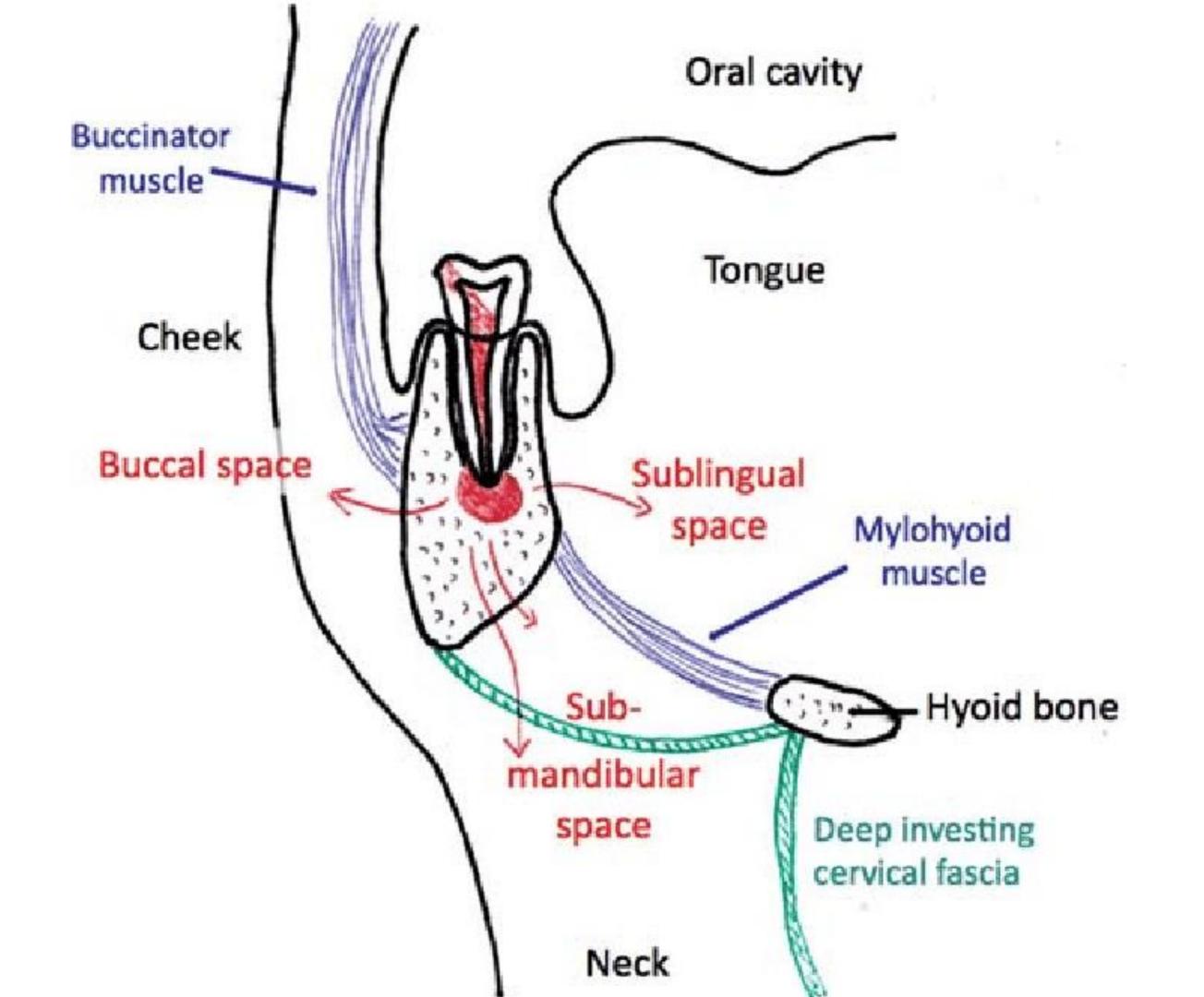
fasting time: 6 hours food 2 hours water

Definitive surgical management of infection

https://youtu.be/ZllGG7lpA5g?si=7uduzkxB2Epcckp5&t=165

NECK ABSCESS DRAINAGE! HOW to DRAIN a SUBMANDIBULAR DENTAL INFECTION (youtube.com)

https://www.youtube.com/watch?v=ZllGG7lpA5g





# BUILD KEY KNOWLEIGE.

- Identify acute cervicofacial infection
- Appreciate the importance of triage and when to refer
- Increased confidence with initial management of head and neck infection

- Assess the patient with acute cervicofacial infection
- Be able to competently triage patients with infection
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- Be able to refer and signpost patients to OMFS/specialist practice
- Initial management of infection as an OMFS DCT

#### N. IRELAND DENTAL CORE TRAINEE INDUCTION



# QUESTIONS



david.johnston2@setrust.hscni.net