### Hip Fractures and Bone Protection

- NICE Hip Fracture: Management (CG124), 2023
  - Average age of hip fracture M 84 F 83
  - □ 10% die within 1 month
  - 1/3 die within 12 months
- SIGN 142 Management of osteoporosis and the prevention of fragility fractures 2015, rev 2021
  - Secondary prevention fragility fracture>/=50
    - Alendronic Acid
    - Zolendronic acid
    - (demosumab)

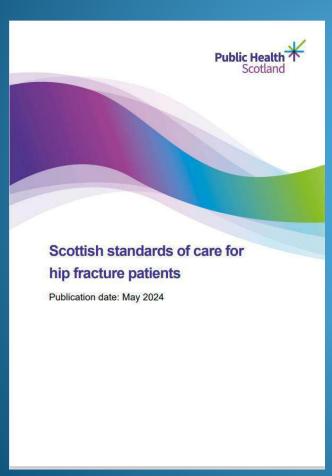
https://www.sign.ac.uk/media/1812/sign-142-osteoporosisv3.pdf#:~:text=SIGN%2oguidelines%2oare%2oproduced%2ousing%2oa%2ostandard %2omethodology%2othat%2ohas

https://www.nice.org.uk/Guidance/CG124#:~:text=This%2oguideline%2ocovers%20mm wing%2ohip%2ofracture%20in%2oadults.%20It%20aims

# Hip Fractures and Bone Prevention...and the dentist?

- Local document Medicine of the Elderly 2018
- most of the evidence base for treatment comes from trials of women under the age of 80
- There is a small risk of osteonecrosis of the jaw
- It is important to review dentition, and consider dental referral pre-treatment
- Care home residents.... Average life expectancy is around 2 years...and therefore the majority are unlikely to benefit from osteoporosis treatment.
- For this reason a pragmatic approach, tailored to the individual, including consideration of life expectancy is required.

# Hip Fractures and Bone Prevention...and the dentist?



- Patients over 50 admitted with a fragility hip fracture must have the following bundle of three measures within 30 days of admission:
- 1. Given 150,000 to 250,000iu of oral vitamin D within the first seven days of admission.
- 2. Given zoledronic acid therapy unless contraindicated within 30 days of admission. The contraindications include extremely poor dental health
- 3. If suitable for zoledronic acid therapy or on existing osteoporosis treatment, patients are referred to the local bone health pathway for follow up within 30 days.

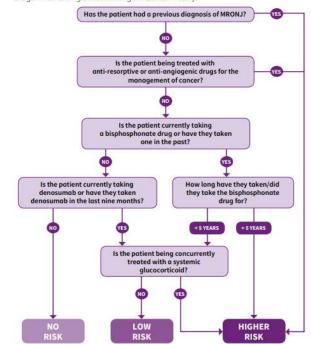
### Dental Guidance?



#### Risk Assessment

Assess whether a patient taking anti-resorptive or anti-angiogenic drugs is at low risk or higher risk of developing MRONJ based on their medical condition, type and duration of therapy and any other complicating factors and record this in the patient's clinical notes.

Ask about past, current, or possible future use of anti-resorptive or anti-angiogenic drugs when taking or confirming a medical history.



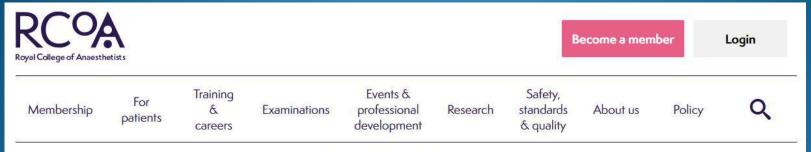
**N.B.** Be aware that any low risk patient who continues to take bisphosphonate drugs after their five-year medication review should be reclassified as higher risk.

### Multidisciplinary working

- MoE "lunch and learn"
- Dental guidance

On the basis of the available evidence, please do not initiate a dental referral for patients commencing an anti-resorptive or anti-angiogenic drug for osteoporotic fracture-risk reduction. If your patient is complaining of an acute dental or oral problem or you are aware of a problem in your patient's mouth which merits urgent dental attention, please refer to the hospital dental department in the normal way.





Home > For patients > Patient information resources > Anaesthesia and risk

Risks and side effects – becoming confused after a general anaesthetic (delirium)

### Out of every 100 people



10-50 had delirium

50-90 did not

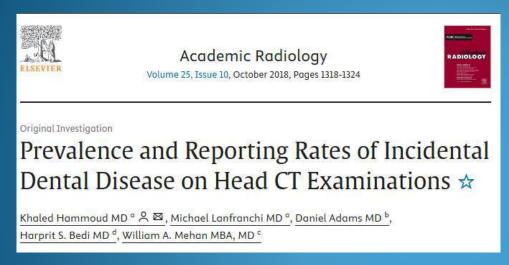
#### How likely is it to happen?

The risk of delirium varies for each person, depending on different things. The risk is higher if:

- > you are over the age of 60; the older you are, the higher the risk of developing delirium
- your physical health is poor at the time of surgery
- your cognitive ability (thinking, remembering, reasoning, etc) is impaired at the time of surgery
- you have dementia or a condition that affects your brain
- you have a mental health condition
- you take lots of medications for different medical conditions
- you drink a lot of alcohol
- you take recreational drugs
- you have difficulties walking and moving about
- you have poor eyesight or hearing
- you need emergency surgery.



### Dental findings on other imaging



- 33% of the randomly selected head CT examinations included the level of the teeth
- Dental disease was determined to be present in 40%–41% of these cases.
- Only 11% of the initial reports mentioned dental disease



### NHS implant acceptance criteria



Guidelines for Selecting
Appropriate Patients to Receive
Treatment with Dental Implants:
Priorities for the NHS

#### Aws Alani BDS MFDS MSc

Specialist Registrar in Restorative Dentistry Department of Restorative Dentistry Newcastle Dental Hospital NE2 4AZ

#### Karl Bishop MScD DRD MRD FDSRCS FDS(Rest Dent) RCS LLM

Chair, Clinical Standards Committee Faculty of Dental Surgery, RCS (England). Consultant in Restorative Dentistry ABMU LHB, Momiston Hospital. Swansea SA6 6NL.

#### Serpil Djemal BDS MSc MRD FDSRCS(Rest dent)

Consultant in Restorative Dentistry & Clinical Lead for Dental Trauma Dental Services Kings College NHS Foundation Trust London SES 9RW

#### Tara Renton BDS MDSc PhD FDS RCS FRACDS(OMS) MHEA

Chair/Academic Lead Oral Surgery, Kings College London. Honorary Consultant, Kings College Hospital London, Department Oral Surgery, Bessemer Road, London SES 9RW.

### NHS implant acceptance criteria

#### **DENTAL IMPLANTS**

Patients considered for treatment will be limited to those in the Department's priority groups (see above):

Management of acute infection or significant problems such as fracture of implants or components will be offered where appropriate. However, given the large number of systems available, this is not always possible.

#### Note:

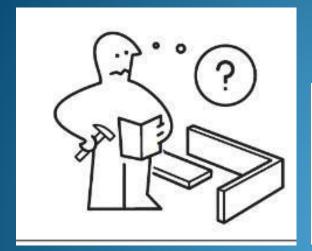
Dental implants are not provided to patients who have:

- Poor oral hygiene
- Active dental or periodontal disease
- A smoking habit

Care is not provided for patients seen elsewhere in order to:

- Complete treatment
- Rectify surgical or prosthodontic problems
- Maintain implants or prostheses

### Types of implants



During the last two decades, many modifications have been developed to improve the long-term success of implants. Today there are more than 1300 types of dental implants are available, in many different materials, shapes, sizes, lengths and with different surface characteristics or coatings.





## Digital solutions?



ORIGINAL ARTICLE

Digital denture scanning and 3D printing for residents in care homes: A feasibility study for pre-empting denture loss

Daniel Gillway X. Mili Doshi

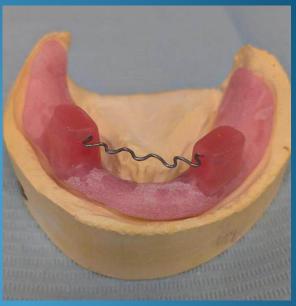
First published: 29 October 2023 | https://doi.org/10.1111/ger.12723



## But don't forget the OGs









# The future?

### **Future considerations**

- Changing needs of patient population?
- Service resource?
- Access?
- Clinical networks?
- Patient pathways?
- Clinical knowledge and skill gap?
- Digital technology?
- Implant failure/salvage?
- Patient involvement and education?
- Redefining outcomes?
- Palliative dentistry?



• Dentistry of the Elderly?

### Conclusion

- To achieve optimum outcomes:
  - We have a responsibility to have awareness of the potential challenges of the future in our older patients and how we might look to tackle these
  - Embracing multidisciplinary working is key
  - We might consider the application of Realistic Dentistry for both individual patient care planning and delivery, and service design and delivery

# Acknowledgments

- NHSL Colleagues
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