

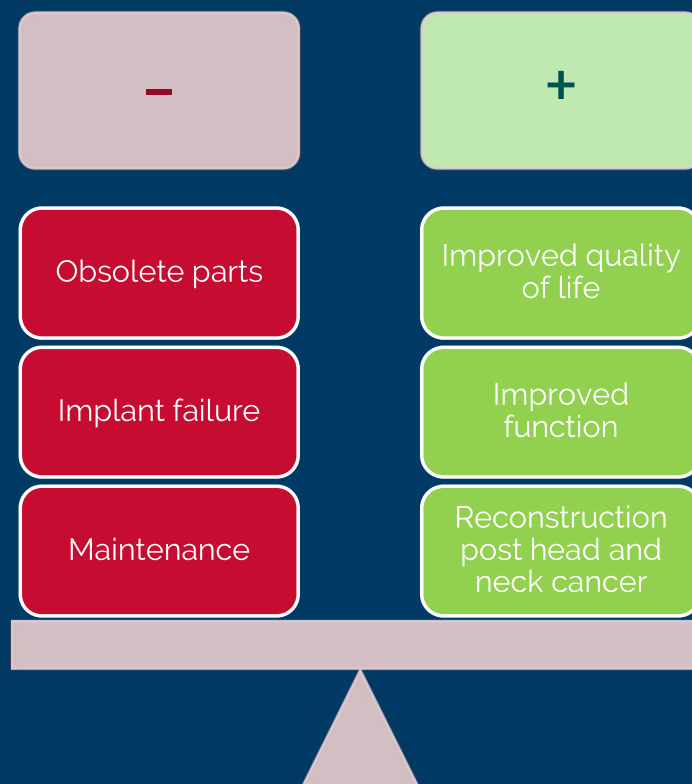
Living longer with implants

Dr Francesca Mullan



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Living longer with implants



Living longer with implants

More older attending with existing implants

Age alone does not influence implant success rate in older patients

- After 10 years, a success rate of over 91% for dental implants was found in the older population and comparable to the general population *Srinivasan et al., 2017*

There is weak evidence that implant biological complications may be more prevalent in older people

Dementia, osteoarthritis and Parkinson's disease amongst many other reasons, could impair adequate oral hygiene around implants

Implant placement in the older patient: Indications

- Avoidance of removable dental prostheses in partially edentulous patients.
- Preservation of existing partial dentures after loss of strategic abutment teeth.
- Stabilisation of partial prostheses with supporting short distal implants.
- Stabilisation of mandibular complete dentures with implants.

Implant placement in the older patient: Contraindications

Local	Poor oral hygiene
	Space available for final restoration, e.g. severely over-erupted opposing dentition or reduced occlusal vertical dimension
	Insufficient bone quality and or quantity, e.g. highly atrophic anterior mandible or posterior maxilla (can be associated with highly pneumatized sinus)
Medical	ASA IV or higher or medical conditions that carry significant risks to life
	Bleeding disorders
	Uncontrolled diabetes mellitus can impair wound healing and the process of osseointegration
	Bone disorders, for example, osteopenia and osteoporosis
	Anti-resorptive medication, for example, bisphosphonates, receptor activator of nuclear factor kappa-B ligand (RANKL) inhibitors, and antiangiogenic agents has a risk of osteonecrosis
	Radiation treatment to the head and neck region (although some may still receive implants with very careful planning, and consideration of radiation dose)
	Patients ≥80 years old may have a slight tendency for a higher risk of early implant loss
Patient factors	Smoking
	Bruxism
	Frailty; those who may be unable to tolerate treatment or travel for multiple visits
	Physical impairment that may impact on mouth opening or ability to maintain oral hygiene
	Consider cognitive decline: Anticipated longer-term deterioration in ability to provide oral hygiene or maintain implant treatment must be considered. This does not contraindicate implant placement in people with cognitive impairment in all instances
	Highly dependent on help for the activities of daily living may be unsuitable for implant therapy and the level of maintenance required

What does a 10-year life span mean in the context of life expectancy?

Nutrition and tooth loss



Tooth loss has been associated with nutritional deficiency



In those living independently dentate participants had higher intakes of most nutrients than edentulous

The intake values of all nutrients except non-milk extrinsic sugars and heme iron, were also statistically significantly associated with the number of posterior occluding pairs of teeth.



In those living in institutions the mean intakes of most nutrients lower than those living independently

There was little difference between the dentate and edentate subjects



Nutritional status

Vitamin C lower in edentate vs dentate
Vitamin C reduced in reduction of no of occluding pairs
Vitamin A lower in edentate vs dentate only

Management of the older edentulous patient

The McGill consensus 2002 "There is now overwhelming evidence that a two-implant overdenture should become the first choice of treatment for the edentulous mandible"



The York consensus 2009 "A substantial body of evidence is now available demonstrating that patients' satisfaction and quality of life with ISOD mandibular overdentures is significantly greater than for conventional dentures"



Thomason et al. 2012 "There is now overwhelming evidence to support the proposal that a two-implant overdenture should become the first choice of treatment for the edentulous mandible. The next task is to identify and overcome barriers for the delivery of this care for the benefit of edentulous patients"

The benefits of implant supported overdentures.



Overall oral function



Biting force



Chewing



Confidence

What determines success?

Alveolar
ridge

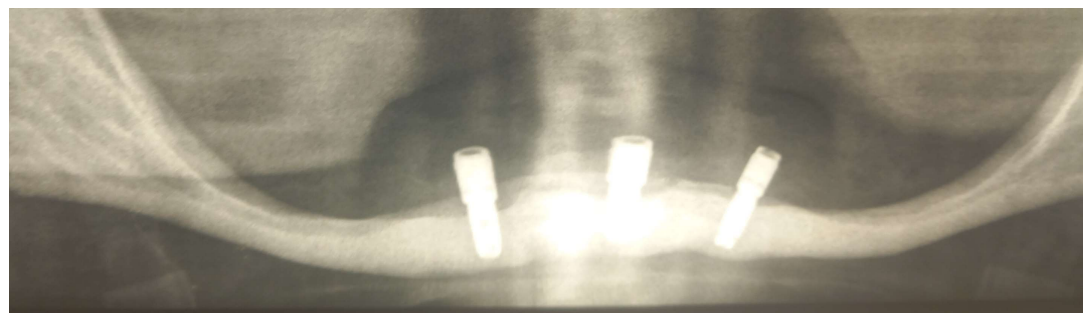
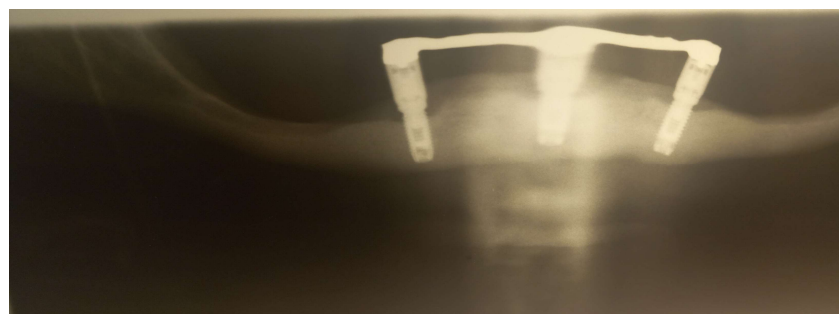
Quality of
denture
provided

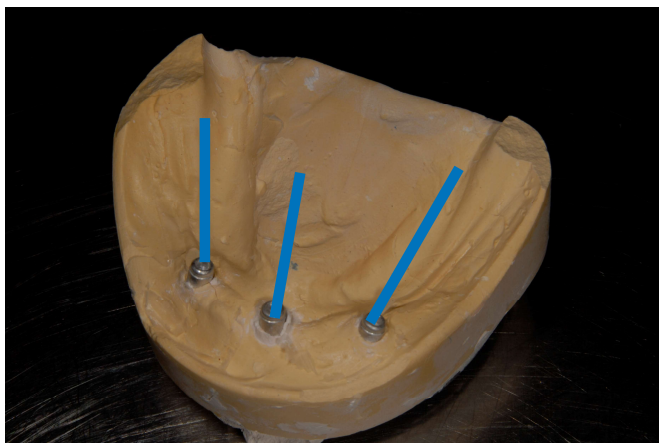
Position and
alignment
of implants

Challenging cases

Implants placed
1983

Converted to classic
locator system
2009

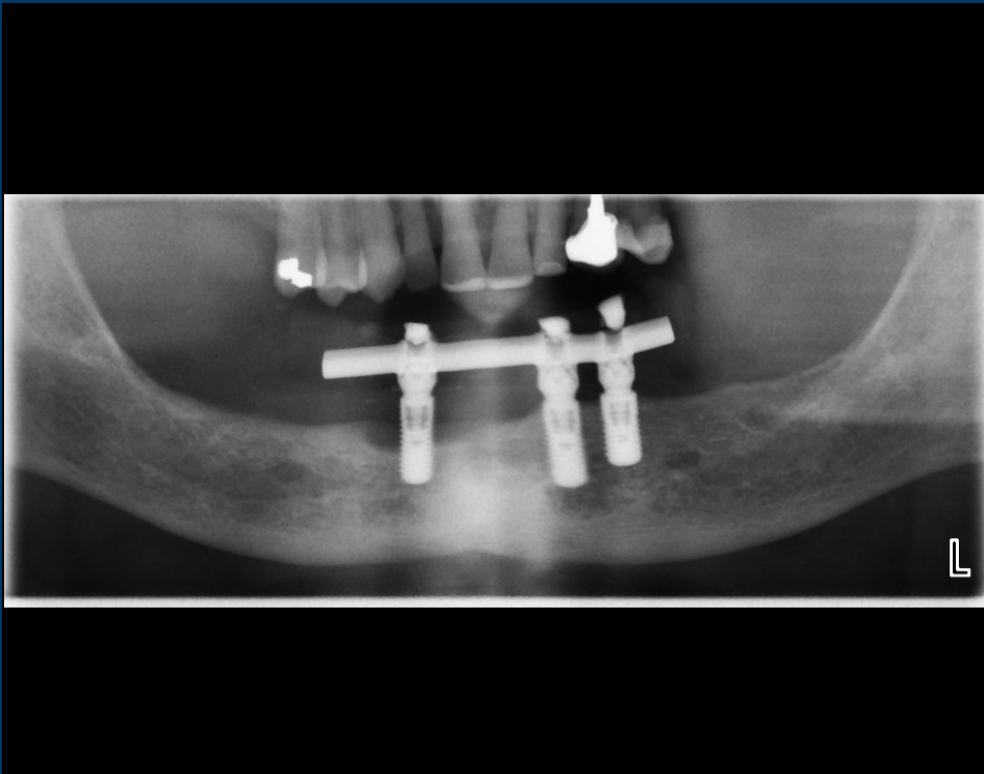


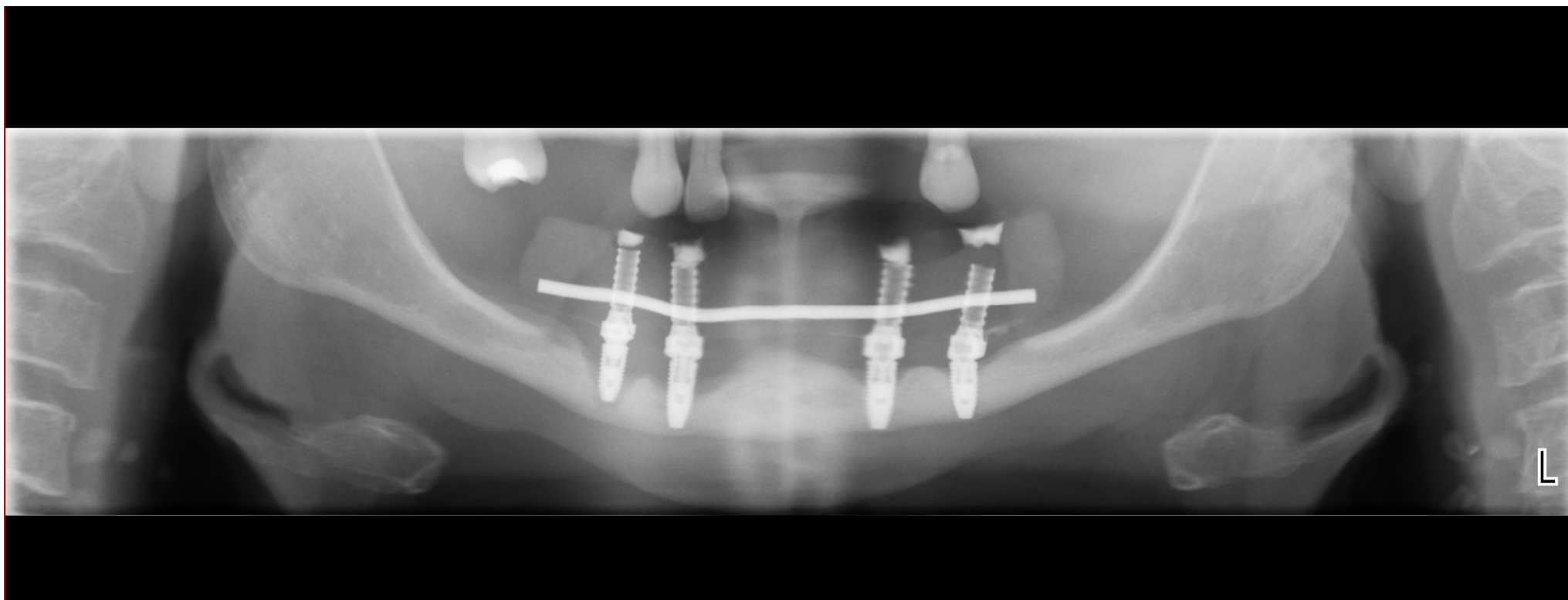


Repeated remakes

2023 convert to bar
retained with
'aligned locators'

Peri implantitis





Peri implantitis cement retained abutments



Failed implant

Who is going to help with maintenance if personal circumstances change?



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Who is trained to support care?





Implant componentry

Identifying implant systems

Obsolete implant systems and components

Multiple systems

Loss of familiarity/expertise with systems

Thank you

Joshua Jackson

Richard Holliday

Sandeep Pai

Tom Dennis