



# Case report highlighting the importance of nursing support for an older patient with Down's syndrome

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## Introduction

People with Down's syndrome have some degree of learning disability which can make undergoing dental treatment sometimes challenging. Good nursing support is crucial when supporting anxious patients having treatment in the least restrictive manner. Here we reflect on the case of an older patient with Down's syndrome requiring a dental extraction prior to Aortic Valve Replacement (AVR) to reduce his risk of infective endocarditis.

## Case Report

Male  
59

### Medical History

The patient was admitted to East Surrey Hospital for Critical Aortic Stenosis. He also has:

- Down's Syndrome
- Kidney Disease
- Hypothyroidism
- Ulcerative Colitis

### Social History

- Lives in sheltered accommodation
- Likes Star Wars, colouring books and Bucks Fizz Music
- Non Smoker
- Non Drinker

### Dental history

- Irregular attender
- Previous treatment under LA/GA

### Medications

- Levothyroxine 100mcg OM
- Omeprazole 10mg OD
- Salofalk 3g MR- OD
- Aspirin 75mg
- Furosemide 40mg OD
- Adcal d3 BD

## Nursing Support

Prior to the patients arrival to the department and to maximise co-operation several reasonable adjustments were made: booking a longer appointment time, playing his preferred music and preparing the clinic in good time to minimise waiting. Chairside nursing support was paramount to helping the patient complete his treatment as he needed a lot of time, reassurance and encouragement, for example: he struggled with the local anaesthetic so I suggested we do it a little bit at a time and count down from 5 which helped him manage the injection.

Behaviour management is very important when working with patients who have learning disabilities and 'Rewards are one of the most powerful tools we have for changing behaviour'<sup>3</sup> Post extraction I gave lots of positive reinforcement to the patient to encourage better co-operation with dental treatment in the future. As I spent lots of time engaging with the patient I was aware of his love for Star Wars so I offered him a Star Wars sticker at the end of treatment

I also supported the DCT with behavioural management who had limited experience in treating patients with learning disabilities

Although this patient is 59, people with Down's syndrome have a shorter life expectancy with an average life expectancy of 50-60 years of age, which means they are older than their chronological age. This has improved dramatically from an average of 9 years in 1900 <sup>2</sup>



## Examination

Initially the patient was uncooperative for examination of any kind on the ward. An OPG radiograph showed periapical pathology associated with a lower molar that was clinically grade two mobile; indicating the need for extraction. The dental core trainee was concerned that the patient might not tolerate the extraction under local anaesthesia, and due to his medical co-morbidities, the cardiac team were reluctant for the patient to have IV sedation or general anaesthesia for the extraction. A decision was made to try local anaesthesia. There were time pressures as the patient was due to be transferred to a cardiac centre to have his valvular surgery.



Figure 1 - Orthopantomogram



## Cardiology Referral for Dental Assessment

At East Surrey Hospital we have a Cardiac Referral pathway which means all patients requiring any kind of Cardiac surgery will need to be seen by one of our team for dental screening to ensure the patient is dentally fit; this is to reduce the risk of infective endocarditis.

Figure 2 – The Patients Cardiac Referral for Dental Assessment

## Discussion

People with Downs Syndrome have 'a 12-fold higher mortality rate from infectious diseases'<sup>1</sup>, therefore ensuring this gentleman was dentally fit prior to surgery was crucial to reduce his risk of Infective Endocarditis.

Covid-19 has had a major impact on the NHS, including access to dental treatment both in primary and secondary care. Waiting times for treatment under GA/sedation has increased. For that reason nursing support is vital to allow patients to undergo dental treatment under local anaesthetic, especially when it precludes life saving surgery or is detriment to their health.

Utilising dental care professionals in cases like this will be critical in our recovery from Covid 19 and developing the soft skills in our patients best interest.

Dental nurses can also support more junior dentists with behavioural management techniques.

## Conclusion

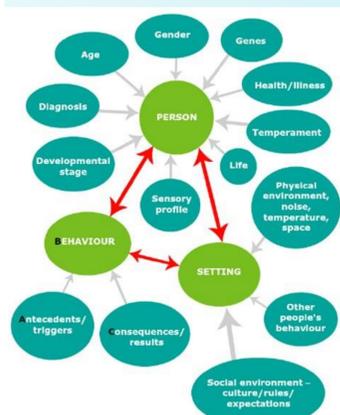
Dental nurses have an important role when providing dental care for patients including older patients who may be more frail. Taking time to make patient specific, reasonable adjustments has great impact on patients' co-operation. This is especially critical when their dental condition precludes lifesaving surgery.

The patient has since successfully had his AVR surgery and has now been discharged.

## References

1. Special Care in Dentistry Handbook of Oral Healthcare by Crispian Scully CBE, Pedro Diz Dios and Navdeep Kumar
2. A Clinical Guide to Special Care Dentistry by J Fiske, A Dougall and D Lewis
3. <https://www.downs-syndrome.org.uk/wp-content/uploads/2020/09/3.-Strategies-and-interventions.pdf> -November 2021

## Understanding Behaviour



Framework for understanding behaviour and emotional wellbeing from The Downs Syndrome Association <sup>3</sup>