

# Use of NG tube in administration of Clozapine in complex case presentation Galway CAMHS

## Inpatient Unit

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## Introduction

Catatonia is a complex condition with a very heterogeneous presentation. According to recent studies it is prevalent in around 10% of acute psychiatric admissions, 4%–67% for schizophrenia as an underlying or comorbid condition<sup>1</sup>. We present a case of a 17 year old young man admitted to the CAMHS in-patient unit with catatonia, refusal of all oral intake, treatment resistant Schizophrenia, co-morbid depressive episode, and complex medical history, including a later diagnosis of 22q11 Deletion syndrome. CAMHS Inpatient Unit Merlin Park is a specialist unit for the treatment of Eating Disorders and introduced Nasogastric tube feeding as a treatment intervention for those admitted with Eating disorders in 2017 as the first unit in Ireland to do so in a CAMHS setting. The expertise of the nursing and medical team in use of NG intervention allowed medication administration in this complex case where other treatment options were not possible.

## Case Description

This young man initially presented to the inpatient unit for admission when he was 16 years of age. He had no contact with CAMHS services prior to seven to eight weeks before admission. In the community he had some response to Risperidone. However, there was a significant deterioration in his mental state after the initial month of outpatient treatment with decreasing intake of food and fluids, and refusal of medication. He was admitted involuntarily to the inpatient unit under the Section 25 court order (MHA 2001).

At time of admission he was observed to stand up for most of the night in a fixed posture, with complete refusal of oral intake, minimal verbal responses, and during physical examination he was seen lying in a fixed posture with his head above the couch “psychological pillow” and presented with waxy flexibility at times. As he was refusing oral medication, Lorazepam and Olanzapine were administered intramuscularly. The doses of these were titrated up with some improvement noted and there was some food and fluid intake with extensive support and encouragement from the nursing staff. Improvement did not progress however and indeed, further deterioration was noted. Following trials of 3 antipsychotics, he was diagnosed with treatment resistant schizophrenia with a view to commencing Clozapine.

However catatonic symptoms were again intermittent, with refusal of medication and food and fluids. Clozapine was not available as an IM immediate acting option. Oral intake had deteriorated significantly leading to physical health issues. After due consideration, meeting with family and further opinions it was decided to introduce NG feeding and extensive care plan was put in place to support same with multidisciplinary input.

Once clozapine commenced and due to length of duration of episode of untreated psychosis, full compliance was the goal. Adequate oral intake were necessary to ensure medical stability in view of medical and genetic history. Hence NG tube and administration did proceed on multiple occasions. As the medication dose was very gradually increased and mental state improved the use of NG tube became less frequent and oral medication was introduced prior to discharge to home and community support.

## Conclusion and Discussion

As noted in previous research, Nasogastric clozapine can be safely delivered to help establish and maintain patients with treatment-resistant schizophrenia on the most effective treatment<sup>2</sup>. Individuals with 22q11DS-schizophrenia respond well to Clozapine, but may present with increased frequency of side effects<sup>3</sup>. In this case it was necessary to use the NG tube on several occasions. At times this was challenging but perseverance with the treatment trial has allowed for adequate trial and treatment response in a complex and challenging case. Multidisciplinary input and expertise in use of NG tube due to Inpatient Unit Eating Disorder programme were key factors in this intervention being implemented.

This complex case would support the need to consider the use of nasogastric tube as a means to administer not just food and fluids but also oral medication in those with catatonia and/or acute refusal of oral intake. This provides a treatment option prior to or alongside the consideration of ECT. It also highlights the need for staff competence and expertise to ensure successful use of this intervention with the least stress for the patient and their family.

Consent: Written and verbal informed consent was obtained from the patient and their parents for the presentation of the case for academic purposes.

The abstract for this presentation was initially submitted for the Winter Conference 2020, but was not presented at the time.

1. Solmi M. et.al. Prevalence of Catatonia and Its Moderators in Clinical Samples: Results from a Meta-analysis and Meta-regression Analysis. *Schizophrenia Bulletin*, Volume 44, Issue 5, September 2018, Pages 1133–1150, <https://doi.org/10.1093/schbul/sbx157>  
2. Till A, Selwood J, Silva E. The assertive approach to clozapine: nasogastric administration. *BJPsych Bull*. 2019 Feb; 43(1): 21–26. doi: 10.1192/bjb.2018.61 PMID: PMC6327298 PMID: 30223913  
3. Butcher NJ, Fung WL, Fitzpatrick L, Guna A, Andrade DM, Lang AE, Chow EW, Bassett AS. Response to clozapine in a clinically identifiable subtype of schizophrenia. *Br J Psychiatry*. 2015 Jun;206(6):484-91. doi: 10.1192/bjp.bp.114.151837. Epub 2015 Mar 5. PMID: 25745132; PMID: PMC4459828.