# **Electroconvulsive Therapy used for the Treatment of Chronic Rectal Pain when Standard Treatments Fail: A Case report**



# Introduction

• 90-year-old male with Major Depressive Disorder (MDD) visits pain management for rectal pain lasting two years.

## **Case Description**

- Patient was seen for a pain management consult while in the hospital.
- Patient at that time was complaining of chronic rectal pain for which he has been taking Percocet 1 tab 4 times a day with minimal relief. He describes the pain as a throbbing constant ache that gets up to 10/10 pain on a regular basis. Pain has been ongoing for the past two years and has progressively gotten worse. At times he is unable to sit down because the pain is so severe.
- Patient was started on gabapentin 300mg TID and scheduled for a ganglion impar block to hopefully treat a possible source of his rectal pain.
- From the block, patient stated he had about 60% pain relief for 1 week. Patient did not receive any relief from the gabapentin so medication was discontinued. A second injection was scheduled targeting the same area with similar results but lasted closer to a month. Patient was scheduled for a third injection, which only provided 10% relief.
- Due to minimal relief, ganglion impar block was not attempted again.
- Patient was sent to Physical Therapy for pelvic floor exercises and prescribed medical THC/CBD. Patient was also informed to follow up with Psychiatry due to history of depression, which may be exacerbating his pain.
- Due to unrelenting pain, and severe depression and anxiety the psychiatrist recommended him ECT therapy.
- Patient received 2 treatments a week for 3 weeks with complete resolution of all rectal pain, and depression/anxiety.
- Since than patient has followed up once a month for depression treatment.



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#### **Assessments and Results**

• Since beginning ECT, patient's pain has completely gone away after over a year. Theo only side effect patient notes it amnesia of the procedure, as well as the pain itself. His wife notes only loss of memory associated with his rectal pain and procedure. Both short and long term memory remains intact.

## Discussion

• The mechanism by which ECT improves chronic pain is not clear. ECT causes changes in the availability of neurotransmitters and causes a consistent increase in the amount of endorphins in the central nervous system; leading to cell growth and increase in synaptic connectivity. ECT also appears to increase pain threshold and pain tolerance in patients with MDD, along with improvements in depressive symptoms.

## Conclusion

• This case describes a patient with major depression and severe rectal pain refractory to multimodal pharmacologic and interventional therapies with great response to Electroconvulsive Therapy. Since beginning ECT, his rectal pain has not returned and patient's function and quality of life has greatly improved. ECT is a safe alternative for patients with MDD and have chronic pain that is refractory to both pharmaceutical and interventional therapies.

## References

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