Intrathecal Baclofen as a Potential Cause of Neuropsychiatric Disturbances in a Patient with Spasticity of Cerebral Origin

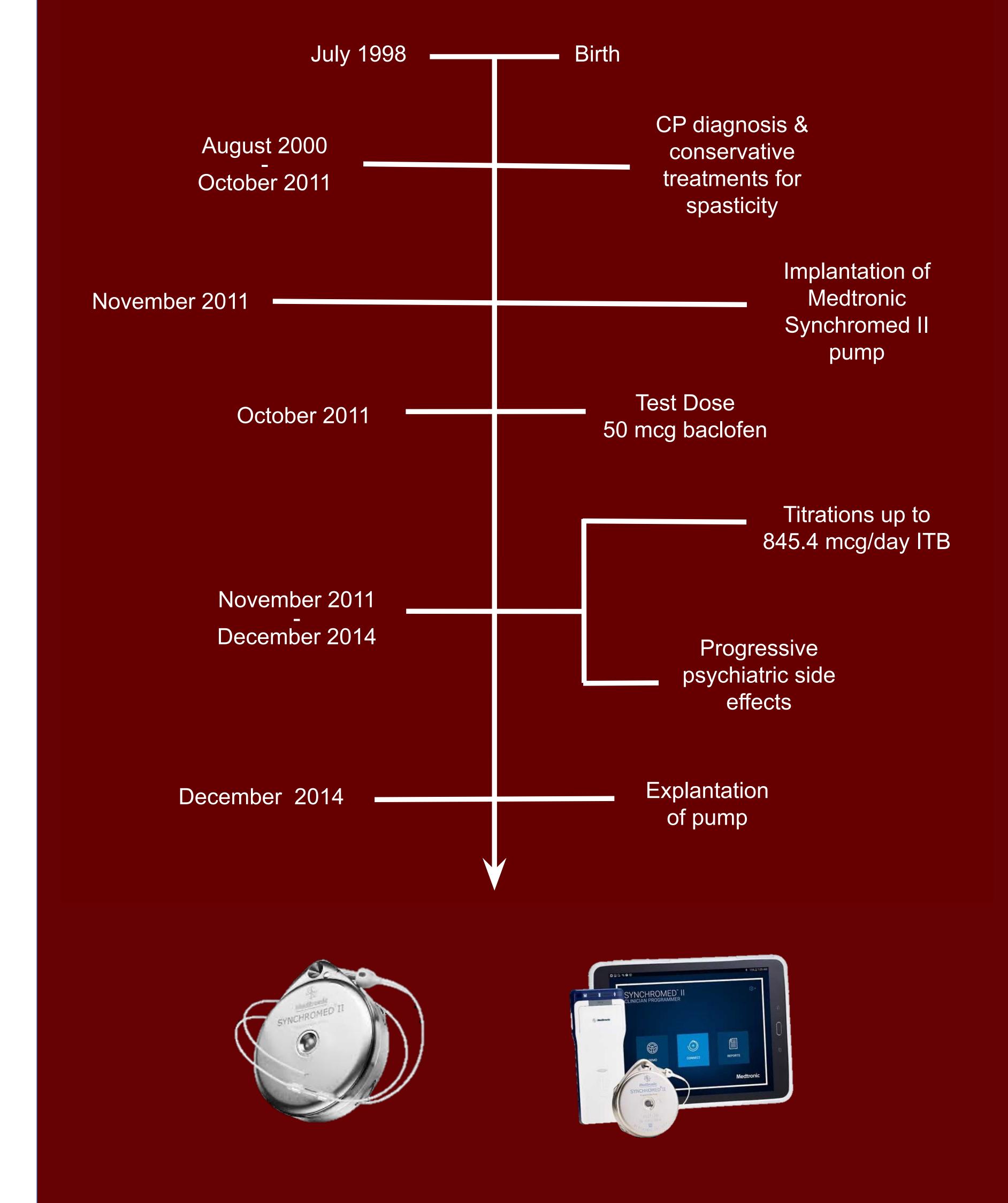
Cynthia Francis, BS, MS4 and Shashank Davé, DO Indiana University School of Medicine Department of Physical Medicine & Rehabilitation

INTRODUCTION

Intrathecal baclofen (ITB) has primarily been used as a treatment for pediatric patients with persistent spasticity despite conservative management. The following case report presents a pediatric patient with progressive neuropsychiatric symptoms after ITB.

CASE REPORT

A patient with spastic diplegic cerebral palsy underwent implantation of an ITB pump. With each dose uptitration, the patient and family noticed progressive psychiatric symptoms, including severe depression, suicidal ideation and anorexia. After multidisciplinary consultation, it was felt that the ITB might have caused the new symptoms. After explanation of the pump, her symptoms completely resolved and have not recurred.



DISCUSSION

- Outcomes with ITB such as reductions in spasticity with improvement in comfort, mobility and sleep.
- Common AE's include constipation, lethargy, hypotonia, and confusion.
- Neuropsychiatric symptoms have previously been described in spasticity of **spinal origin**.
- To our knowledge, this is the 1st reported case with spasticity of **cerebral origin** in pediatric patients.

CONCLUSIONS

- ITB for the treatment of spasticity from CP could be associated with psychiatric symptoms.
- The clinician should be vigilant to keep this possibility on the differential diagnosis while evaluating ITB patients who present with neuropsychiatric disturbances.

REFERENCES

- MedtronicTM. Synchromed II. Medtronic. Published 2018. Accessed Dec 2020. www.europe.Medtronic.com.
 MedtronicTM. Synchromed II Clinician Programmer. Medtronic.
- Published Dec 2019. Accessed Dec 2020. www.global.Medtronic.com. 3. Saol Therapeutics Inc. LIORESAL® INTRATHECAL. Published
- 2019. Accessed Dec 2020. www.lioresal.com.
- 4. Albright AL, Gilmartin R, Swift D, Krach LE, Ivanhoe CB, McLaughlin JF. Long-term intrathecal baclofen therapy for severe spasticity of cerebral origin. *J Neurosurg*. 2003;98(2):291-295.
- 5. Ramstad K, Jahnsen R, Lofterod B, Skjeldal OH. Continuous intrathecal baclofen therapy in children with cerebral palsy when does improvement emerge?. *Acta Paediatr*. 2010;99(11):1661-1665



