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## Chiari Malformations

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## Background

- This case presents a 20-year-old who pitches collegiately for a Division II college.
- The patient suffers from headaches, more severe than migraines since she was 12 years old.
- The athlete was diagnosed with Chiari Malformation, Type 1, at the age of 12.
- Doctors found that she has fluid backing up in a cavity on her spinal cord.
- Athlete underwent surgery shortly after.



## Treatment

- Surgery was performed to decompress the posterior fossa.
- Stretching and cupping therapy is used to release tension.
- Radiofrequency ablation, also known as rhizotomy, is performed yearly to masque her headaches. This method is burning the nerve endings to reduce the transmission of pain experienced.

## Objective

- This case study is demonstrating an emphasis on the necessity for awareness on congenital conditions, as well as their treatment plans.

## Differential Diagnosis

- Spina Bifida, birth defect that occurs when the spine and spinal cord do not form properly

## Uniqueness

- Chiari Malformations form when the skull is smaller than normal, ultimately blocking the flow of cerebrospinal fluid.
- Chiari Malformations have been reported to be rare.
- Despite her severe headaches and dizziness, the athlete pushes herself, beyond her symptoms.
- The severity of the symptoms is managed with rehabilitation, thermotherapy, stretching and yearly radiofrequency ablation to allow for her to continue a Division II athletic career.

## Conclusion

- Athlete utilizes thermotherapy and stretching around neck to alleviate pressure and symptoms from the Chiari Malformations.
- While this is a rare and serious injury, it can be treated successfully. Allowing athlete to continue a successful career in softball.

