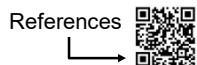


## Introduction

- Postdural Puncture Headache (PDPH) is a rare but debilitating complication of neuraxial anesthesia that can occur following an inadvertent dural puncture
- Gold standard treatment is an Epidural Blood Patch (EBP) which is invasive with multiple potential complications
- A simple, minimally invasive treatment for PDPH is a sphenopalatine ganglion block (SPGB)
- Current lack of education and awareness on SPGB for PDPH
- No available anesthesia focused SPGB videos that practitioners can utilize as a point of care reference
- Delivery of education presentation and creation of a quick reference video demonstration on SPGB may aid in decreasing the gap in practice

## Background & Significance

- Inadvertent dural puncture occurs at a rate of 1.5%, more than half of these patients develop PDPH
- EBP complications:
  - Back pain, worsening PDPH, neurological complications, infection, failure at a rate of 20%
- Sphenopalatine Ganglion Block (SPGB)
  - First described in 1908
  - Minimally invasive, effective treatment for headaches
  - Requires minimal resources with lower risk of complications
- Positive impact of using video in education
- Point of care references such as phone applications and videos are being used in everyday clinical practice
- YouTube, online platform housing a variety of video content → easily accessible via website and mobile application



## Methodology

### Design

- Participants took part in virtual educational presentation and quick reference video on SPGB for PDPH and completed post-intervention survey. Participants educated on how to access video on the Total Recall: Educational Videos for SRNA's YouTube channel
- Participants received follow-up survey 3 weeks after initial presentation via email

### Setting

- A Statewide Professional Organization for Nurse Anesthesia Fall RRNA Virtual Symposium via Zoom - October 13th, 2021

### Study Population

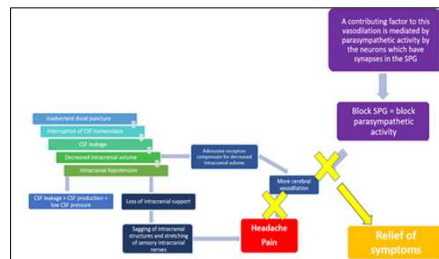
- Currently practicing CRNAs attending the Virtual Fall Symposium from any state
- Excluded: RRNAs & CRNAs not currently practicing
- Participation is on a volunteer basis
- Goal sample size: 60 participants to complete both surveys

### Measures

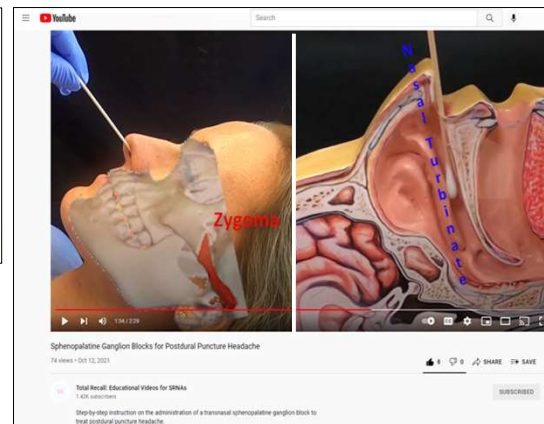
- Data collected from the immediate post-intervention survey and delayed follow-up survey
- Immediate post-intervention survey focus on participants demographics, current knowledge and experience with PDPH and awareness of SPGB
- Delayed follow-up survey focused on whether participants used the block in practice since the presentation was given, if they were successful or not, why it was not used and what barriers they may have faced
- Data collected from numbers of views/comments on YouTube

### Analysis

- Statistical analysis performed using Qualtrics Software and Excel



➤ SPGB quick reference video and slide from educational presentation

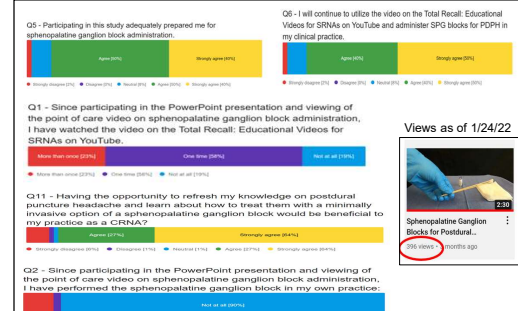


## Results

### Demographics

- 48 CRNAs
- Most from New Jersey and New York
- 40.63% with >10 years experience
- 84.38% work in a hospital setting
- 34.38% work with OB patients once a week, 18.75% once a month
- 40% not familiar, 50% somewhat familiar with SPGB
- 40% not confident, 34.38% somewhat confident to perform SPGB
- 59.38% strongly agree, 31.25% agree this opportunity would benefit their practice

### Surveys



- Chi-square result = P-value of 0.0029
- High likelihood that our data sample is representative of the total population of CRNAs = total population CRNAs will use SPGB as a treatment option for PDPH in their clinical practice

## Discussion

- Unable to obtain ideal sample size, possibly due to: State Association charged \$25 registration fee for CRNAs; Timing of Fall Symposium – Wednesday at 6pm
- Demographics of the study participants identify lack of exposure to OB patients
- Increased time (> 3 weeks) between the surveys may have allowed for more possibility to use SPGB in practice