

The Futility of Cosyntropin in the Management of Post-Dural Puncture Headache: a Propensity-Matched Retrospective Analysis

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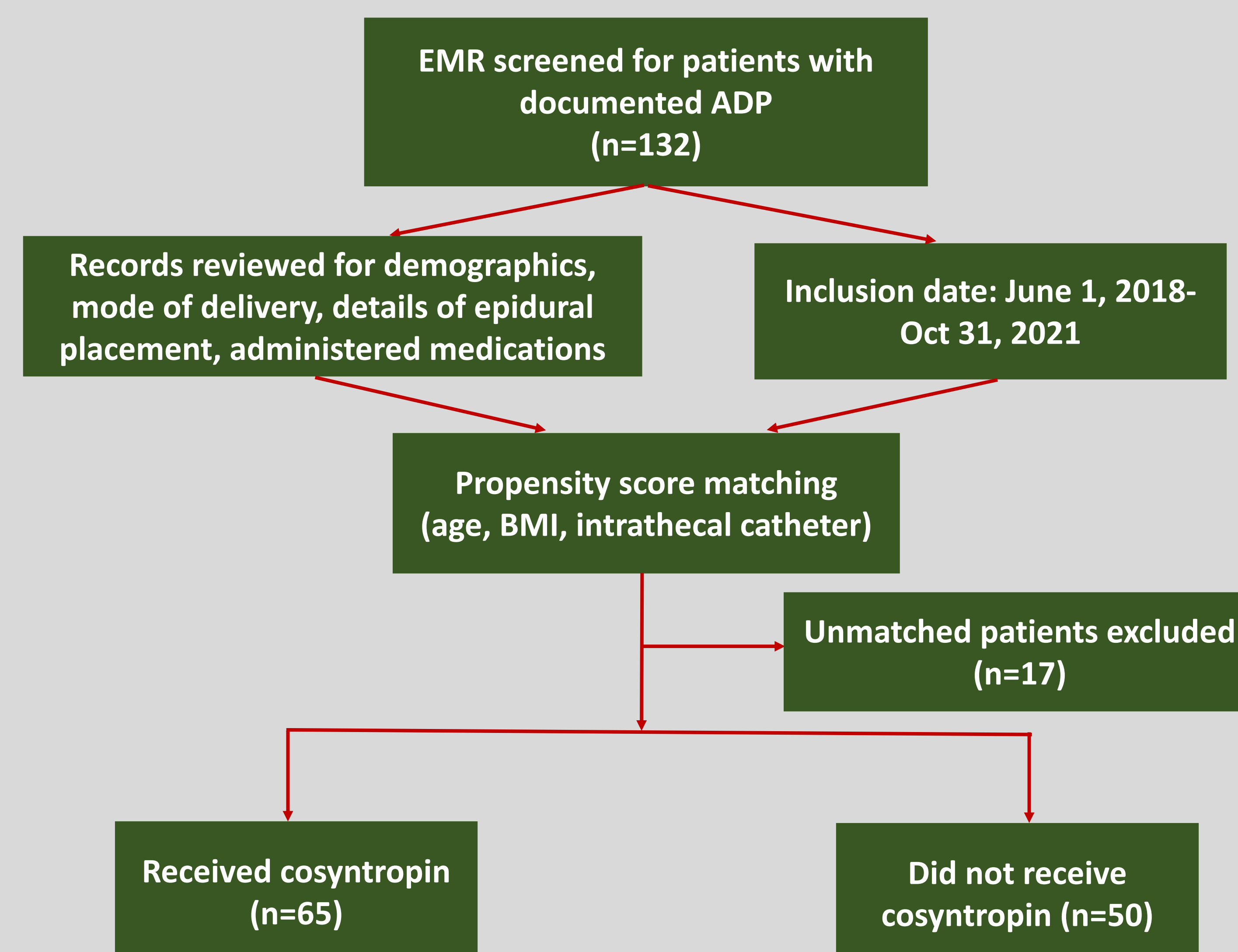
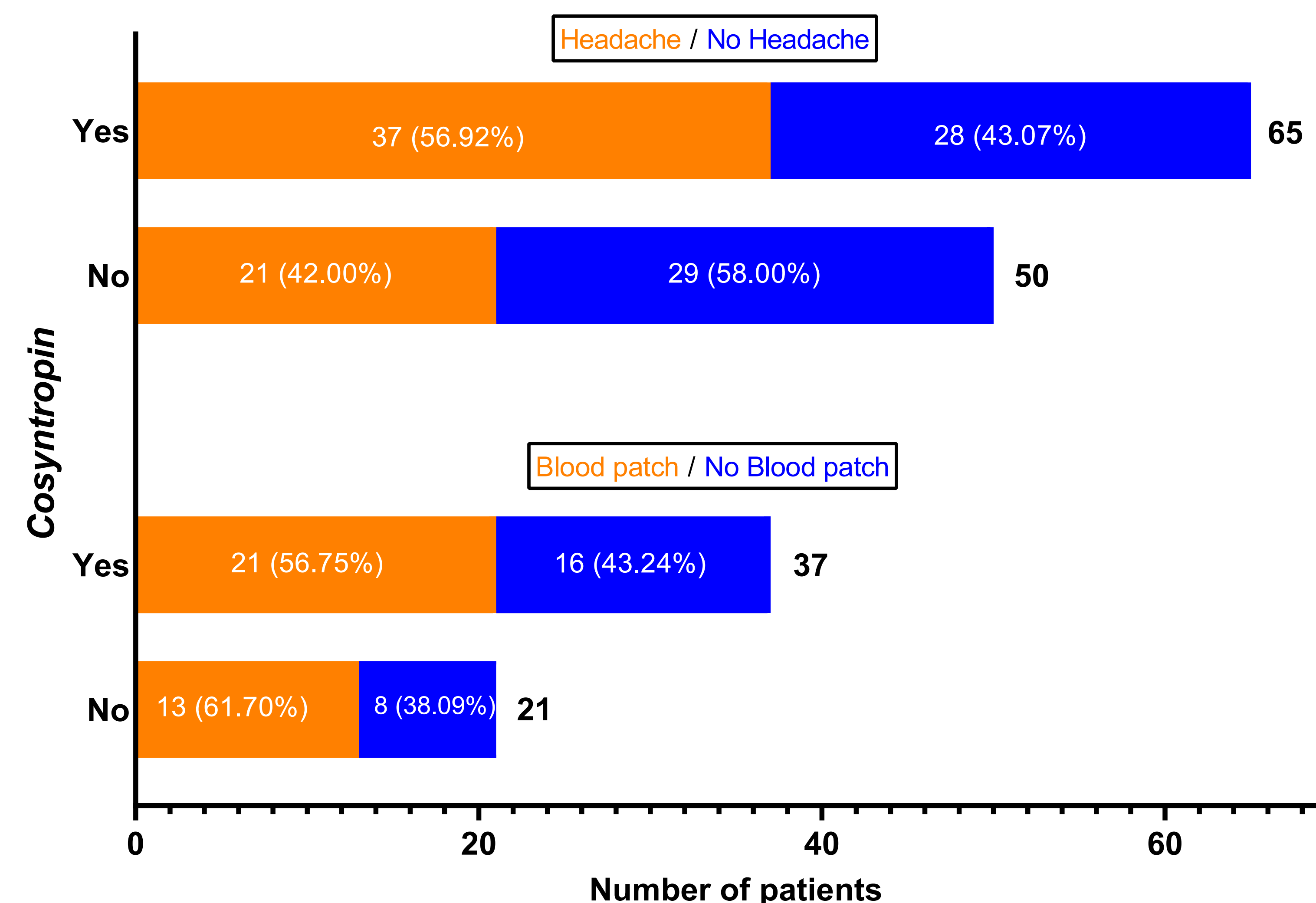
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Introduction

- PDPH is a well-documented complication of accidental dural punctures (ADP), with occurrence rate up to 86%¹
- Reports have shown successful treatment of PDPH with cosyntropin^{2,3}
- However, prior studies were limited by small sample size
- This is a retrospective study to assess reduction of PDPH with prophylactic cosyntropin administration

Methods: Propensity-Matched Retrospective Trial



Results

- BMI was found to be negatively correlated with PDPH incidence ($p=0.04$)
- Cosyntropin did not reduce the incidence of PDPH ($\beta=0.62$, $p=0.08$) or the need for epidural blood patch ($p=0.70$)
- PDPH was not significantly affected by age ($p=0.28$) or by placement of an intrathecal catheter ($p=0.34$)
- PDPH was not found to differ among races or ethnicities

Discussion

- The efficacy or lack thereof of cosyntropin in PDPH management remains unchallenged
- Prophylactic administration of cosyntropin is not associated with a reduced incidence of PDPH or need for EBP
- The finding remains true even when considering age, BMI, and placement of an intrathecal catheter
- This is the largest case series to examine the efficacy of cosyntropin in PDPH prevention

Study Limitations

- Variability in dose and timing of cosyntropin administration
- Inability to ascertain receipt of treatments, including but not limited to analgesics
- Possibility that some patients with ADP were not identified

References

1. Berger CW, Crosby ET, Grodecki W. North American survey of the management of dural puncture occurring during labour epidural analgesia. Can J Anaesth. 1998 Feb;45(2):110-4.
2. Carter BL, Pasupuleti R. Use of intravenous cosyntropin in the treatment of postdural puncture headache. Anesthesiology. 2000 Jan;92(1):272-4.
3. Hakim SM. Cosyntropin for prophylaxis against postdural puncture headache after accidental dural puncture. Anesthesiology. 2010 Aug;113(2):413-20.