Can albumin or pre-albumin, as markers of patient malnourishment, predict outcomes in patients with pyogenic spinal infections?

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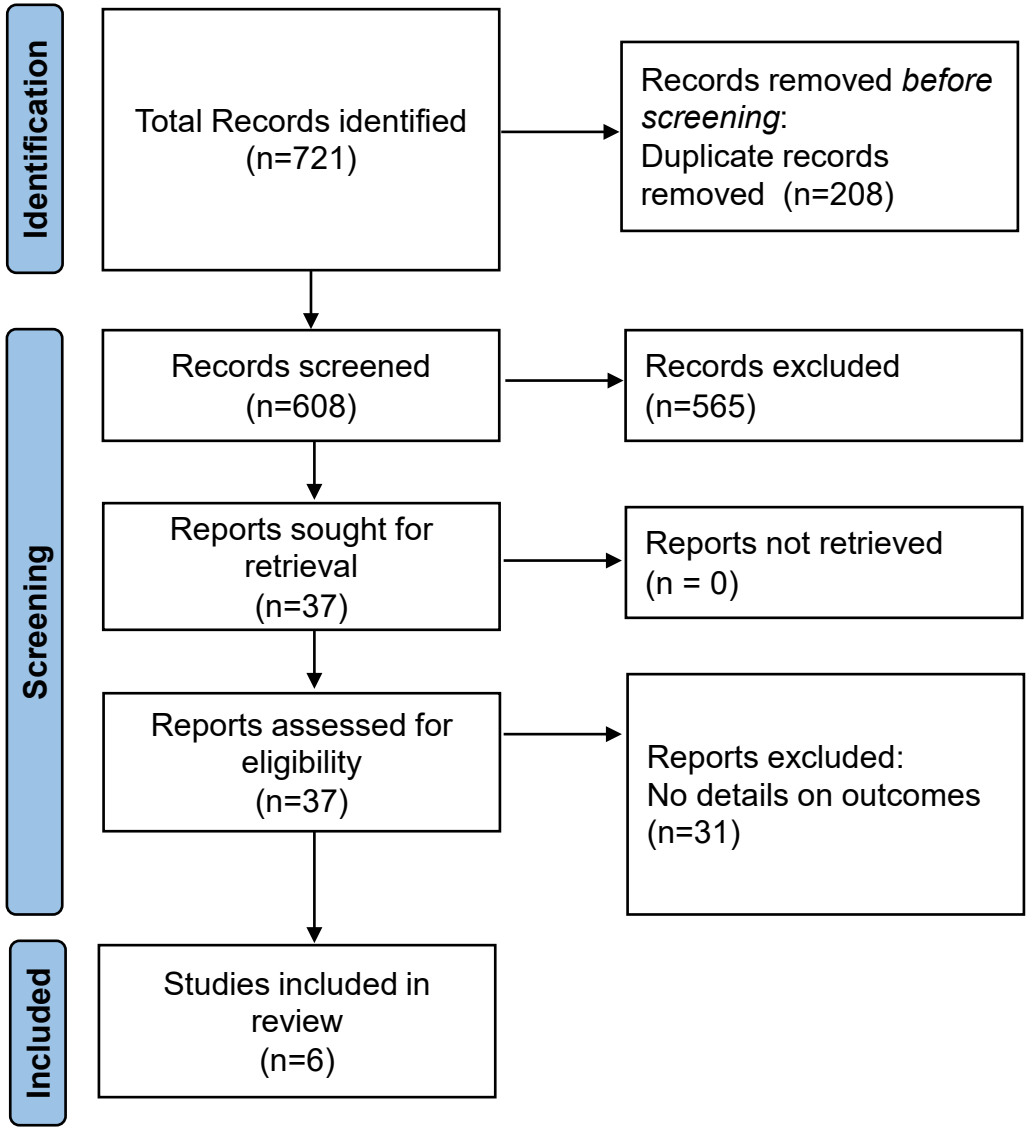
Why is this topic Important

- Pyogenic spinal infections represent significant challenges in spine surgery and infectious disease practice, with potentially devastating consequences for patients.
- Identifying reliable prognostic biomarkers—specifically serum albumin and prealbumin, which indicate patient malnourishment—is essential, as they have proven valuable in predicting outcomes such as mortality, complications, and recovery success across a range of diseases.

Why is this topic Important

- Understanding and advancing our knowledge of these prognostic markers is vital for enhancing patient care, optimizing treatment strategies, and ultimately improving the quality of life for those affected by these serious infections. This research direction holds promise for developing more effective, personalized treatment approaches.

Literature Review/Process



Findings from Literature

- Evidence supports the use of serum albumin as a predictor of outcomes in surgically treated patients with pyogenic spinal infections.
- Lower preoperative albumin levels have been associated with increased 30-day and 90-day mortality , higher reoperation rate, increased postoperative complications, greater unplanned readmissions. And reduced quality of life. However, the studies evaluated were conducted retrospectively or within observational cohorts.
- One study showed no association between initial albumin levels and surgery necessity
- No studies have evaluated pre-albumin as a prognostic marker

Question:

Can albumin or pre-albumin, as markers of patient malnourishment, predict outcomes in patients with pyogenic spinal infections?

❖Response:

Serum albumin <3.5 is associated with increased mortality, higher reoperation rates, an elevated risk of post-operative complications.

❖Vote:

Agree – 100%, Disagree – 0%, Abstain – 0%
(Unanimous Consensus)