



**What is the criteria or defect size which determines whether bone grafts alone or cage with bone grafts be used after debridement?**



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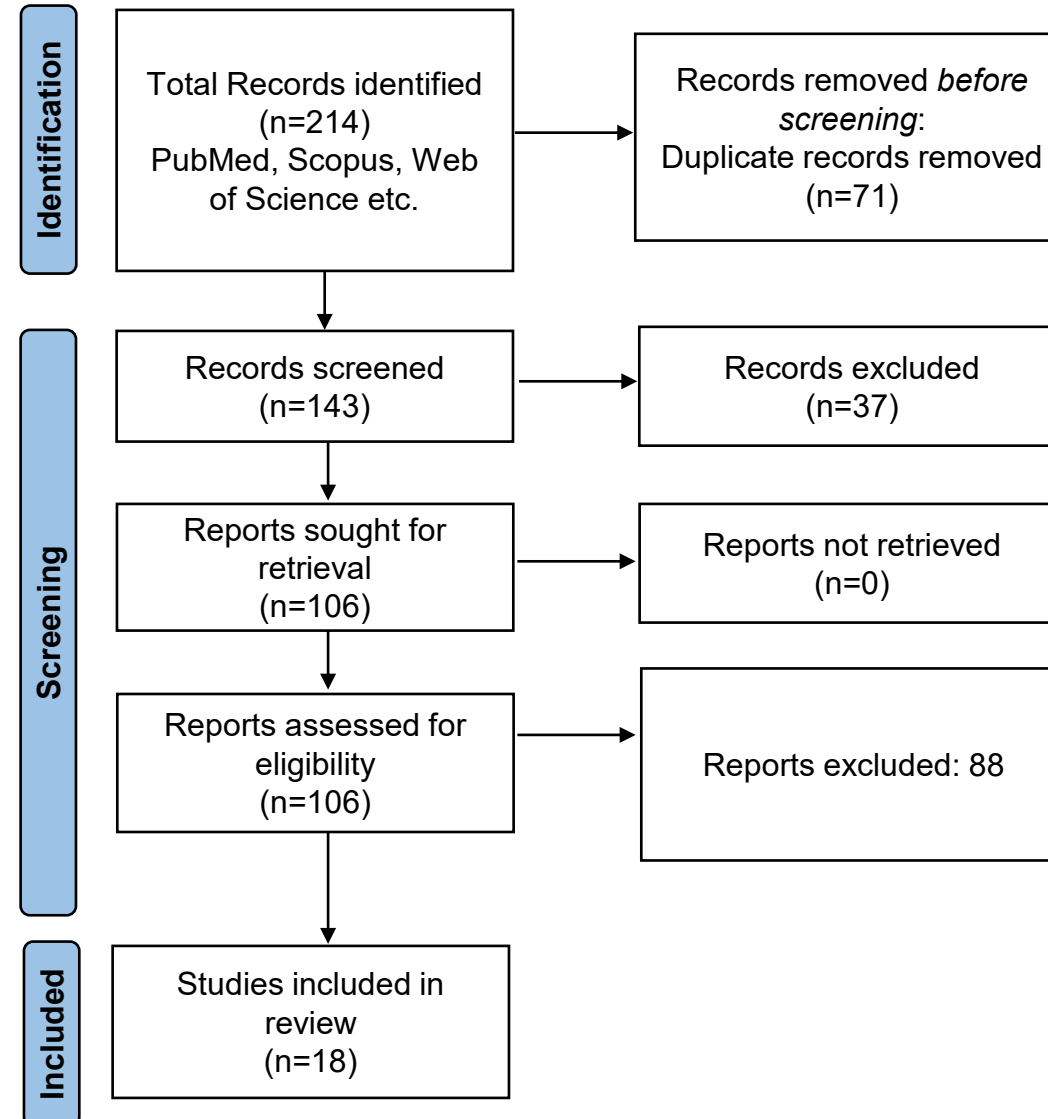


## Why is this topic Important

- Principles of surgical management for infective discitis of the spine include debridement of the infectious focus, stabilization of the spine, decompression of neural elements, and restoration of spinal balance
- Anterior column support is crucial for achieving bone fusion, stability, and preventing implant failure
- Non-structural grafts (granular bone less than 5 mm), structural grafts, and titanium mesh cages are routinely used for filling bony defects
- Despite numerous studies comparing graft types and their efficacy, few have addressed the defect size that necessitates the use of appropriate grafts.



## Literature Review/ Process





## Findings from Literature

- Structural grafts like tricortical iliac crest grafts and titanium cages provide good fusion rates, effective deformity correction, and immediate biomechanical stability
- Non-structural grafts are associated with less blood loss, shorter bone fusion time, and lower donor site morbidity
- Anterior column reconstruction with titanium mesh cages when deformity is  $> 30^\circ$
- Non-structural bone grafts can be utilized for single-segment lumbar tuberculosis if the destruction is less than 50% of the vertebral height or if it exceeds 50% but does not involve serious cortical bone destruction, with the capability of implanting pedicle screws on at least one side of the affected vertebra
- Results were good with granular bone grafts in patients with less than 50% bony destruction
- Iliac bone or local bone fragment grafts for vertebral bone defects of less than one motor unit of the spine



## **Question:**

**What is the criteria or defect size which determines whether bone grafts alone or cage with bone grafts be used after debridement?**



# **Response:**

- ❖ **Literature remains limited regarding which graft type should be used based on defect size**



# Response:

- ❖ **Non-structural bone grafts can be considered for vertebral height loss of  $< 50\%$  and Structural grafts or titanium mesh cages in more severe cases**



## ❖ **Vote:**

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