

Vertebroplasty:

**A meta analysis of results
and complications**

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Purpose

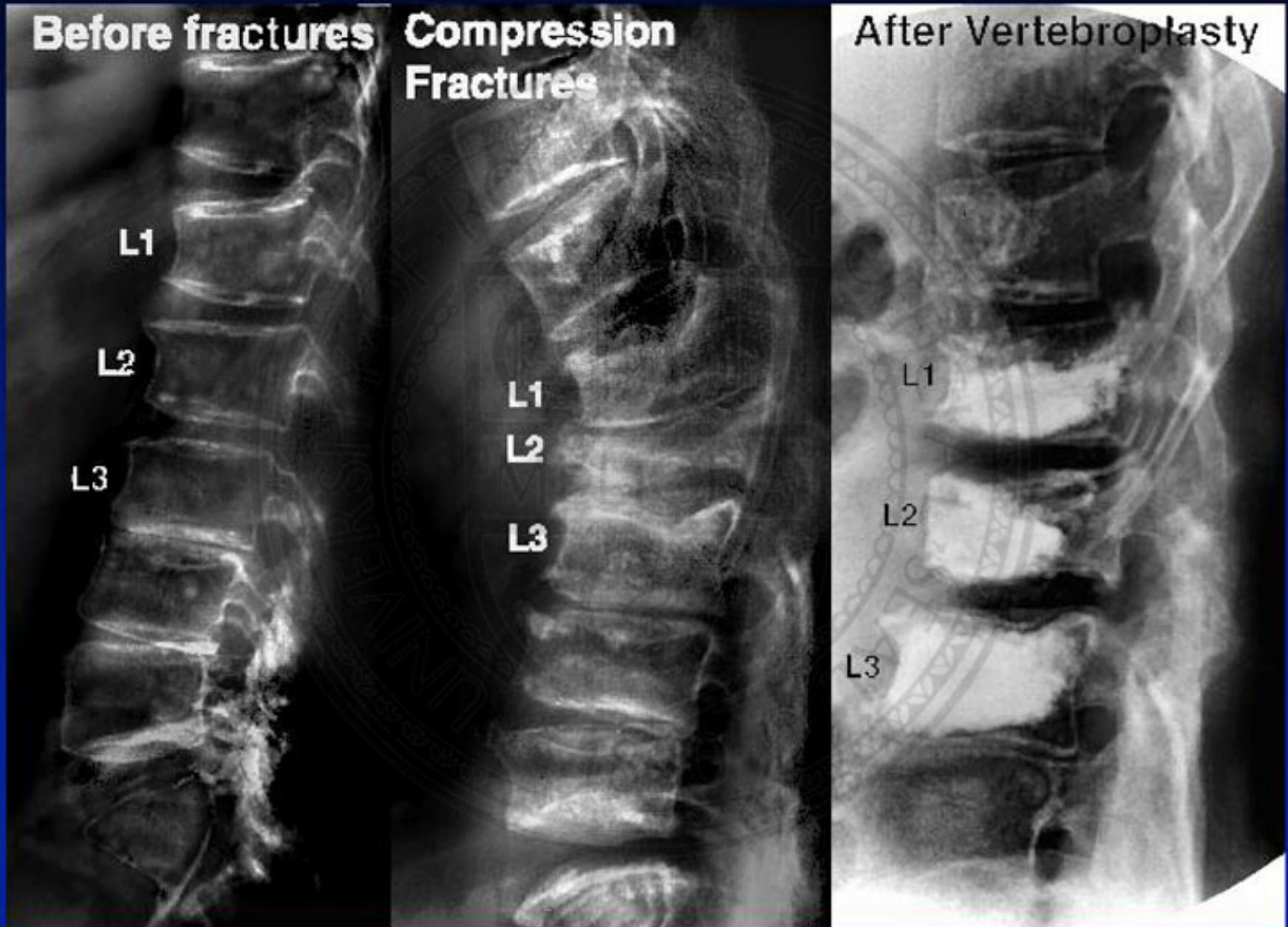
Analyze the published results of vertebroplasty with respect to pain relief and complications.

Material and Methods:

The computerized literature was searched and data from all published articles were collected and tabulated with respect to results and complications of vertebroplasty

Background data

- **56 articles published**
- **21 articles with results and/or complications**
- **Duplicate reports of same patient not included**
- **Kyphoplasty not included**
- **Conference reports not included**



Diagnosis

n=706 patient

- **54% metastasis**
- **41% osteoporosis**
- **18% hemangioma**
- **3% multiple myeloma**
- **1% eosinophilic granuloma**
- **Diagnosis not given for 102 patients**

Results - pain relief

- **706 patients treated**
- **28% complete pain relief**
- **58% marked improvement**
- **13% no change**

Complications

n=706 patients

- **38 cement leakage into neural foramina***
- **27 Para spinal region**
- **21 spinal canal***
- **16 into adjacent disk**
- **Collapse adjacent vertebral body**
- **Pulmonary embolism**
- **Crural pain**
- **DVT**
- **Pneumonia**

***9 patients needed decompressive surgery**

Conclusion

- **Promising results with 90% marked improvement or complete pain relief with few complications**
- **Quality of the study varied**
- **Often no diagnosis or inclusion criteria**
- **No standardized evaluation criteria**
- **No well defined follow-up period**
- **No control material**
- **We need a better study to document what we fell is a very effective treatment**