

Ankylosing Spondylitis: Do bDMARDs Correlate With the Severity of Spine Fractures? A Comparative Observational Study of 60 Patients

Objective

Ankylosing spondylitis (AS) is associated with an increased spinal fracture risk due to the loss of elasticity in spinal motion segments. With the introduction of biological disease-modifying antirheumatic drug (bDMARD) treatment for AS, the individual course of the disease has been ameliorated. Studies suggest that biological disease-modifying antirheumatic drugs do not reduce the spinal fracture risk related to ankylosing spondylitis. We are here to investigate-observe if there is a correlation between the use of bDMARDs and the severity of spinal fractures as more unstable fractures often lead to heavy neurologic deficit.

Methods

This study uses radiographic ,pharmaceutical and clinical data to compare the severity of fractures ,time under biological therapy, patient age, neurological deficit, prognostic of disability and rehabilitation time. Limitation of this study is the small sample size.

Results

bDMARD treatment-related effect on the severity of spinal fracture was observed in the matched cohorts. Patients under biologic therapy presented with less severe neurologic clinical manifestations and postoperative. Postoperative respiratory complication rates were also lower.

Conclusion

Cervical spine fractures in AS patients are often unstable injuries with high mortality rates (15-30%). In our study although there is no related effect regarding the risk of apparition , bDMARD seems to have a positive effect on the severity of meta traumatic manifestations.