Author Year Country Research Design Score Total Sample Size	**Methods**	**Outcome**
Banovac et al. 2004 USA RCT PEDro=10 N=76	**Population:** Gender: males=65, females=11; Severity of injury: complete, incomplete, AIS: A-C; Mean time since injury: 24 days. **Intervention:** The intervention group received oral rofecoxib 25mg daily x4/wk. **Outcome Measures:** Incidence of HO and swelling of joints.	1. A significantly lower incidence of HO was found in the rofecoxib group (13.4%) than in the placebo group (33.3%, p<0.05). 2. In patients receiving rofecoxib, there was 2.5x lower relative risk of developing HO than in the placebo group.
Banovac et al. 2001 USA RCT PEDro=9 N=33	**Population:** Mean age: 33 yr; Gender: males=33, females=0; Severity of injury: AIS: A-D; Groups: treatment=16, placebo=17. **Intervention:** Slow-release indomethacin 75 mg daily versus placebo x3/wk. Patients were followed up clinically until they showed signs and symptoms of HO; all were followed up with x-rays at 2 mo and 6 mo. Where patients had a positive bone scan for HO, the study was D/C and patient was initiated on Etidronate Disodium. **Outcomes Measures:** The effect of indomethacin administration on the incidence of HO.	1. There was a significantly higher incidence of early HO, diagnosed on bone scan, in the placebo group (11/17) than in the group taking indomethacin (4/16) (p<0.001). 2. In the placebo group, 7/17 patients developed x-ray evidence of HO as did 2/16 in the indomethacin treated group (p<0.001).
Zakrasek et al. 2019 USA Case Control N=108	**Population:** *NSAID prophylaxis Group (n=27)***:** Mean age: 31 yr; Gender: males=23, females=4; Level of injury: paraplegia=12, tetraplegia=15; Severity of injury: ASIA A=24, B=3; Time since injury: ≤60 d. *No prophylaxis Group* (n=81): Mean age: 37 yr; Gender: males=64, females=17; Level of injury: paraplegia=29, tetraplegia=52; Severity of injury: ASIA A=55, B=26; Time since injury: ≤60d. **Intervention:** A retrospective chart review of all patients consecutively admitted to the SCI acute rehabilitation program at Santa Clara Valley Medical Center between October 2013 and March 2017. The NSAID prophylaxis group received ≥ 15 days of non-steroidal anti-inflammatory drug (NSAID) therapy (overall range 6–44 days; indomethacin 75 mg sustained release once daily or 25 mg immediate release 3x / day, or celecoxib 200 mg once daily). The no prophylaxis group did not	1. Two individuals receiving ≥ 15 days of NSAID prophylaxis (24 days each) were diagnosed with HO (7.4%), compared with the 29 cases of HO diagnosed in the 81 people who did not receive prophylaxis (35.8%; p=0.006). 2. Significant predictors of HO diagnosis were tracheostomy (odds ratio (OR) 2.8, 95% confidence interval (CI) 1.1 to 7.5, p=0.039), pressure injury during hospitalization (OR 3.3, 95% CI 1.1 to 9.5, p=0.030), UTI during hospitalization (OR 4.3, 95% CI 1.5 to 12, p=0.006). 3. Length of stay was significantly longer in those who were diagnosed with HO compared with individuals not diagnosed with HO (p=0.008). 4. Adverse effects of NSAID use were minimal.

	receive NSAID prophylaxis. **Outcome Measures:** Occurrence of HO, UTI during hospitalization, tracheostomy, inpatient rehabilitation length of stay and adverse event data including rates of bony non-union and gastrointestinal (GI) bleeding.	