

Browser's notes

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Raised levels of metal ions in the blood in patients who have undergone uncemented metal-on-polyethylene. Trident Trident Accolade total hip replacement.

Craig P, et al.
Bone Joint J 2014; 96-b;43–7.

Raised levels of metal ions in the blood following large head metal-on-metal total hip replacement such as cobalt and chromium have been well documented. Because there has been a paucity of reports of metal ions in the blood following uncemented metal-on-polyethylene (MOP) total hip replacement (THR) these authors investigated the relationship between modular femoral head diameter and the levels of cobalt and chromium ions following the aforementioned THR combination. Sixty-nine patients received in 2009 an uncemented Trident-Accolade MOP THR. Forty-three patients (23 men and 20 women, mean age 67.0 years) formed the study group who went on to have cobalt and chromium blood levels of ions measured in 2012. The patients were divided into three groups based femoral head diameter; 12 in the 28 mm group, 18 in the 36 mm group, and 13 in the 40 mm group. Four patients had identical bilateral prostheses; one each in the 28 mm, and 36 mm groups and two in the 40 mm group. There was a significant increase in mean levels of cobalt ions in the blood in those with a 36 mm diameter femoral head compared with these with a 28 mm diameter head. The authors state the clinical significance is unclear and must await larger sample size. However, they have stopped using femoral heads with a diameter of 36 mm or larger.

Clinical considerations for the surgical treatment of pectoralis major muscle ruptures based on 60 cases. A prospective study and literature review

Pochini, et al.
AM J Sports Med, 42, No.1, 95–101.

A prospective study was performed on 60 patients with total ruptures of pectoralis major muscle between 1997 and 2012 with a physical examination every 6 months for the first 12 months and every 12 months thereafter. The mean age was 31.2 years. Bench press exercise was associated with 80 % of the ruptures (48 patients) 41 patients with chronic ruptures were seen after three months. There was an equal number of patients in the operative (31 patients) and non-operative group (29 patients) who were using anabolic steroids (86.7 %). The inclusion criteria were a total rupture of the tendon evident by clinical examination and imaging (MRI or US). Exclusion criteria were diabetes and smokers (2), partial lesions (n-33-with a normal clavicular portion) or lack of MRI or US (n-5). Acute cases (up to 3 weeks after injury) were treated by re-insertion of the tendon into the humerus. For injuries between 3 weeks and 3 months screws and washers were used; those older than 3 months had augmentation using hamstring tendons, screws and washers. The non-operative group had a brace for 15 days for pain relief. Resisted exercises started at 8 weeks and after 5 months patients returned to sports activities. Excellent results were not found in any patients from the non-operative group and were observed in 21 from the surgical group *(67.7 %). Poor outcomes were found in nine patients from the non-operative group (31 %) and three from the surgical group (9.7 %).

Abstracted by M. Sundaram, M.D.
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