

Title of Presentation:

Clinical Factors Predicting Perioperative Blood Loss and Transfusion During Primary Press Fit Total Hip Arthroplasty

Author: Scott H. Hrnack, MD, Lubbock

Co-author: George Brindley, MD

Learning Objectives (After attending this session, the attendee should be able to):

- identify clinical factors that could potentially lead to increased perioperative blood loss in primary press fit total hip arthroplasty.

PURPOSE:

The purpose of this study was to identify clinical factors associated with increased perioperative blood loss and subsequent requirement for transfusion during primary press fit total hip arthroplasty. **Materials and Methods:** Perioperative data was retrospectively collected on 93 patients undergoing primary press fit total hip arthroplasty. Several patient characteristics were examined including age, gender, body mass index, comorbidities, operative time, preoperative hemoglobin, preoperative autologous blood donation, and tobacco use.

RESULTS:

Obesity, and male gender correlated to significantly increased perioperative blood loss ($p < 0.05$); however did not significantly increase their transfusion requirement. Males tended to have the procedure done about 10 years younger than women ($p < 0.01$). Obese patients were more likely to leave the hospital sooner than nonobese patients ($p < 0.01$). Perioperative blood loss was greater in patients that pre-donated blood ($p < 0.01$) and these patients did require almost one more unit of blood than non-donators ($p < 0.01$). There was no difference in preoperative hemoglobin between the pre-donators and non-donators.

CONCLUSIONS:

Perioperative blood loss was greatest in the obese and males, but did not clinically correlate to increasing blood transfusion requirements. Preoperative blood donation did significantly correlate to increased transfusions.