



**Introduction**

Preventing complications and associated costs are paramount in this time of providing efficacious treatment under societal financial strains. Existing studies on nutrition are from small databases, single institutions, or from heterogenous samples.

**Methods**

This was a retrospective analysis of prospectively collected data from the NSQIP database of patients > 18 years old undergoing ADS between 2005 and 2012. Preoperative serum albumin was defined as normal (>3.5 g/dL), hypoalbuminemia (<3.5 g/dL), or not measured. Complications and mortality within thirty days from the surgical procedure were analyzed using multivariate logistic regression analysis with significance defined as p < 0.05. Odds ratio (OR) was calculated with a 95% confidence interval.

**Results**

4,802 patients were identified and the rate of any postoperative complication was 8.5% (408/4802) with 19 deaths (0.4%). 54% of patients were female and the average age was 57.1 +/- 13.8 years. Patients with hypoalbuminemia had a higher rate of major complications, death, reoperation, pulmonary complications , renal complications, sepsis, cardiac complications, UTI, and wound complications (p<0.01, see Table 1). Length of stay (3.8 vs 8.5 days, p<0.001) and operating time was also longer (210.4 minutes vs 256, p <0.002). OR for major complications in patients with hypoalbuminemia was 2.6 (1.5-4.5, 95%CI).

**Conclusions**

Patients with hypoalbuminemia are at an increased risk of major complications or death following ADS. Malnutrition may be a modifiable risk factor to closely monitor during the preoperative workup.

**Learning Objectives**

Our objective was to analyze preoperative nutrition as a risk factor for complications within 30 days following adult deformity surgery (ADS).

**References**