INTRODUCTION
Inclusion body myositis (IBM) is a chronic, progressive, acquired myopathy most frequently occurring in patients older than 50 years of age. It is characterized by a slow progression of painless muscle weakness of the proximal and distal muscles. Currently, there is no known effective treatment for this condition.

Dysphagia is more common in IBM than in other inflammatory myopathies and more severe. It is reported to occur in 38-64% of patients. The resultant aspiration pneumonia associated with respiratory failure may be the most common cause of death in patients with IBM.

Surgical interventions such as cricopharyngeal myotomy (CPM) and upper esophageal dilation as well as botulinum injections of the upper esophageal sphincter (UES) have been studied in patients with IBM, but a comprehensive evaluation of CPM and its efficacy has not been reported.

The objective of this study was to determine the efficacy of CPM in patients with IBM.

METHODS
This is a retrospective clinical study including all IBM patients who underwent CPM for dysphagia between 2000-2008 at our tertiary care institution. Data collected included demographic information, patient clinical examinations, upper and electrophysiographic confirmation of IBM diagnosis, videofluoroscopic swallow studies, preoperative weight loss, previous dilatations, surgical approach, length of myotomy, duration of hospitalization, drainage placement, complications, and outcomes of dysphagia.

Descriptive statistics were reported using means, medians, and ranges. Groups were compared using Wilcoxon's rank-sum tests. Analyses were performed using JMP statistical software (version 6, SAS Institute Inc., Cary, NC).

RESULTS
Among the 14 CPMs performed in 13 patients with IBM (mean age 74), 64% were approached transcervically and 36% endoscopically. The average hospital stay was 1.4 days. The average myotomy length was 4 cm. Of the 14 CPMs, there was one postoperative complication. This patient, with known cardiac risk factors, experienced a myocardial infarction after an endoscopic myotomy performed during an endoscopic CPM. Three patients (two previously treated at an outside institution), who underwent endoscopic CPM, required a transcervical approach later for recurrent dysphagia. Four patients underwent endoscopic dilation prior to CPM with reported relief of symptoms lasting only a few days. Among the 10 patients who underwent endoscopic CPM, in follow-up (mean of 28 months), all patients noted improvement of their dysphagia (71% significant, 29% slight).

DISCUSSION
In this study we review the outcomes of all patients with IBM who underwent CPM at our institution over the past 8 years. All patients referred to our department complained of dysphagia that was refractory to medical and nonsurgical treatment. The majority of our patients were female, despite reports of IBM being more common in men. Cricopharyngeus dysfunction was documented in all patients with a preoperative videofluoroscopic swallow study.

All patients in this study group reported some degree of improvement of their dysphagia. This finding corresponds to the findings of a number of other smaller studies of patients with IBM undergoing CPM with 67–100% reporting benefits.

One patient in the present study experienced complications, esophageal perforation and myocardial infarction. All of the recurrences were treated initially with an endoscopic approach. When endoscopic CPM were performed, inferior constrictor fibers were typically transected whereas during the endoscopic translaryngeal approach the length of the myotomy is based on the contour from the hypopharynx to the esophagus and an inferior constrictor myotomy is typically not performed. The higher recurrence rate in patients treated endoscopically may highlight the importance of an extended myotomy.

Review of the literature reveals that complications from either endoscopic or transcervical CPM are low. Among patients treated with endoscopic CPM, the most common complication was recurrent dysphagia. Transcervical CPM is performed through a cervical incision and may have a lower incidence of complications compared with an endoscopic approach.

CONCLUSIONS
Patients with IBM and associated dysphagia have improved symptoms following CPM. The findings in our study are consistent with previous reports of dysphagia being a prominent feature, often leading to aspiration pneumonia and associated respiratory failure. The most common cause of death in IBM is aspiration pneumonia related to the dysphagia.

The objective of this study was to determine the efficacy of CPM in patients with IBM. This finding is important, as dysphagia is a prominent feature, often leading to aspiration pneumonia and associated respiratory failure, the most common cause of death. In this series, surgical complications occurred with the endoscopic approach. Transcervical CPM was a more definitive approach for dysphagia.

REFERENCES