PK UPPP Flap
Yi How Kao, M.D. State College, P.A.

OBJECTIVE
To present a mucosal preserving, uvula sparing technique of uvulopalatopharyngoplasty (UPPP) for obstructive sleep apnea (OSA).

STUDY DESIGN
IRB approved prospective study for OSA patients with polysomnographic (PSG) evaluation.

METHODS
Plasma knife (PK) assisted UPPP is a modification of the procedure original described by Fujita for snoring. Plasma knife is used for tonsillectomy, hemostasis and to reduce scar contracture lowering incidence of dehiscence (1%) as a result of the reduced thermal injury. Cold knife resection of uvula is limited to the anterior mucosa and any submucosal; preserving the muscularis uvulae and posterior mucosa. A corresponding triangular area of palatal mucosa is removed for reattachment of the uvula. The incision then expands laterally with a V cut into the palatoglossus fold and a horizontal cut across the top of the palatopharyngeous fold creating a sail shaped flap which is rotated laterally into the V cut covering the tonsillar fossa. All mucosa edges are approximated with 2.0 chromic sutures.

RESULTS
Out of 181 total patients, 145 patients completed pre & post operative PSG and were available for analysis. 94 patients (65%) were successfully treated. There were no incidence of nasal regurgitation or pharyngeal stenosis. Average blood loss was 10 to 20cc. 90% of patients were discharged the same day.

CONCLUSION
PK UPPP utilizes rotation flap techniques to prevent pharyngeal stenosis and nasal regurgitation.