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**“Floppy Eyelid Syndrome and Obesity (FLO) Study”**

Floppy Eyelid Syndrome (FES) was first described in 1981 by Culbertson and Ostler. Often under-diagnosed, the reported incidence ranges from 0.5-31.5% with an average age of 51 years. A patient will typically present with a soft, rubbery tarsus that folds in on itself, a loose upper eyelid that everts easily with manual manipulation, and papillary conjunctivitis. Studies indicate that patients with FES are often diagnosed with obstructive sleep apnea (OSA) and have high rates of obesity (Body Mass Index (BMI) > 30). Patients with FES exhibit a diminished quantity of elastin fibers throughout the pretarsal orbicularis oculi muscle and tarsus. Interestingly, a key feature of OSA is pharyngeal elastin degradation which results in laxity of the hyoepiglottic ligament. Thereby suggesting that elastin plays a role in both FES and OSA. Our preliminary data, a small cohort (n=24) suggest that 92% of patients with FES had a BMI > 30, 38% were classified as morbidly obese, and the average BMI was 38.5. Based on the literature and our preliminary data, the current study was designed to test the hypothesis that elastin, a biomarker of elasticity, would be decreased in the stomachs of patients with FES and obesity. A decrease in elastin would suggest that the stretch volume of the stomach is diminished in these patients, which may contribute to decreased fullness following a meal, thereby leading to episodes of overeating and the development of obesity. To test our hypothesis, participants undergoing bariatric surgery will be recruited for this study. Participants will receive a manual external eye exam to determine the presence of FES and will be asked a series of questions about their height, weight, and relevant social and medical history. After bariatric surgery, discarded stomach tissue will be evaluated histopathologically for elastin using Masson's trichrome stain and reticulin stain. The quantity of elastin fibers in the gastric tissue will be determined. We predict a decreased number of elastin fibers in patients with higher BMI's, FES, OSA, and with a history of smoking. This study is ongoing, and patients are currently being recruited and data is being collected.