Purpose: Lichen sclerosus (LS), previously referred to as Balanitis Xerotica Obliterans (BXO), is a chronic, lymphocyte-mediated skin disease that may affect any cutaneous surface but shows a predilection for the anogenital area. When not recognized and treated aggressively, this disease may progress and develop debilitating symptoms. It also may result in significant morbidity in patients undergoing treatment for urethral strictures because unrecognized LS may result in rapid and severe recurrences after surgical treatment. We present our experience with treating patients with LS in an equal-access healthcare system.

Materials and Methods: We performed an IRB-approved retrospective review of all adult men who were treated for LS at our institution over a ten year period. We analyzed all patients diagnosed with LS and recorded patient demographics including age, race, comorbidities, weight, prior topical therapies and invasive therapies. We recorded characteristics of the disease process including physical examination of the external manifestation of the disease, evaluation of the internal manifestation of the disease including retrograde urethrograms, cystoscopy, flow tests and AUA symptom scores. We also recorded the various treatments assigned to patients with the LS. We also reviewed whether or not patients experienced recurrence.

Results: Forty-three (n=43) patients were diagnosed with LS during this review period. Seven (16%) patients were treated with clobetasol cream alone (clobetasol 0.05% applied twice daily to the affected area -this treatment is not approved by the FDA). Ten (23%) patients underwent circumcision (6) or meatotomy (4). Twelve patients (28%) presented with significant meatal involvement resulting in meatal stenosis and voiding complaints, and all 12 underwent extended meatoplasty. Six of the twelve also had trials of clobetasol. Fourteen (33%) patients had pendulous urethral involvement (8 with partial pendulous urethral involvement, 6 with pan pendulous urethral involvement) at initial presentation. Of these, 11 underwent staged repairs, one underwent an augmented repair with buccal tissue, and 2 had a definitive perineal urethrostomy. Six of the eleven patients who underwent staged repair experienced recurrence following urethroplasty with tissue transfer techniques. All recurrences occurred with the use of buccal mucosal grafts (with a split-thickness skin graft augment in 1), and two patients had recurrence in the graft itself. In the remainder of patients presenting with less-severe disease and treated aggressively with clobetasol and/or minor procedures, there were no recurrences noted on follow-up exam, and all of these patients had documented normal flow patterns on non-invasive urodynamics, with an average follow-up of 28.4 months.

Conclusion: Our data suggests that early aggressive topical therapy along with minimally invasive surgical therapy to relieve high pressure voiding may prevent progression of LS in patients who present with limited disease involving the skin and meatus. In those patients with the disease limited to the external skin, we recommend early and aggressive treatment with a potent steroid. In patients with prepucial or limited meatal involvement, the combination of potent steroids along with minimally invasive surgeries such as circumcision and meatotomy can be curative. When patients have significant meatal involvement the extended meatoplasty (EM) also yielded good results when used in conjunction with potent steroid therapy.

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PENILE PLAQUE INCISION AND TEMPORALIS FASCIA GRAFTING IN PEYRONIE’S DISEASE
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(Presentation to be made by Dr. Hannoun)

Introduction/Objectives: The surgical management of Peyronie’s disease consists of either tunical plication or plaque incision/excision and grafting in those with preserved erectile function. The use of temporalis fascia as a suitable graft was previously described in a small series of 12 patients. We seek to evaluate the results of temporalis fascia as a suitable graft for the correction of acquired penile curvature.

Materials/Methods: We performed a retrospective review of 51 patients who underwent correction of acquired penile curvature via penile plaque incision and temporalis fascia grafting by a single surgeon.

Results: All patients suffered from penile curvature severe enough to preclude satisfactory sexual intercourse. The mean age of our patient population was 59.7 years (range: 41-77 years), and the mean duration of disease process from onset to surgical intervention was 24.4 months (range: 6-216 months). Of the 51 patients, the curvature distribution was: dorsal (45), ventral (3), left-sided (2), and right-sided (1). The temporalis fascia is harvested through a post-auricular incision by an otolaryngologist and tailored to an ellipse measuring 6x4cm. After wide plaque incision, the graft is sutured to the tunical defect using a continuous 5-0 non-absorbable polypropylene suture. A light penile dressing and Foley catheter are placed; both are removed prior to patient discharge on post-operative day #1. Patients resume sexual intercourse after 4-6 weeks. The mean follow-up on 47 patients was 29.3 months (range: 2.2-283.5 months): 36/47 (77%) patients reported straight erections at intercourse, 6/47 (13%) reported mild persistent curvature sufficient for intercourse, and 5/47 patients with recent surgery have not yet resumed sexual intercourse. Four patients are pending post-operative follow-up after recent surgery. Nine patients (19%) reported mild hypo- or hyperesthesia near the glans and 1 patient (2%) reported a post-operative hematoma, of which all resolved without additional intervention. There were no donor site complications.

Conclusions: The temporalis fascia graft provides a safe, efficacious, and acceptable functional result for patients with acquired penile curvature undergoing penile straightening surgery with autologous tissue.