

clinical curio which they are unlikely to encounter. It does, however, offer potential insight into the mechanisms of initiation and propagation of uveitis and other autoimmune disease, and confirms the importance of the CD4⁺ T cell in this process. The explanation as to why some individuals develop malignancy and others autoimmune disease is eagerly awaited.

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- Hinuma Y, Nagata K, Hanaoka M, Matsumoto T, Kinoshita K, Shirakawa S, et al. Adult T-cell leukemia: antigen in an ATL cell line and detection of antibodies to the antigen in human sera. *Proc Natl Acad Sci USA* 1981; 78: 6476-80.
- Poesz BJ, Ruscetti FW, Reitz MS, Kalyanaraman VS, Gallo RC. Isolation of a new type C retrovirus (HTLV) in primary uncultured cells of a patient with Sézary T-cell leukaemia. *Nature* 1981; 294: 268-71.
- Yoshida M, Seiki M, Yamaguchi K, Takatsuki K. Monoclonal integration of human T-cell leukemia suggests causative role of human T cell leukaemia virus in the disease. *Proc Natl Acad Sci USA* 1984; 81: 2534-7.
- Lightman SL, Chan C. Immune mechanisms in chorio-retinal inflammation in man. *Eye* 1990; 4: 345-53.
- Mochizuki M, Watanabe T, Yamaguchi K, Yoshimura K, Nakashima S, Shirao M, et al. Uveitis associated with human T-cell lymphotropic virus type I. *Am J Ophthalmol* 1992; 114: 123-9.
- Tajima K. Malignant lymphomas in Japan: epidemiological analysis of adult T-cell leukaemia/lymphoma (ATL). *Cancer Metastasis Rev* 1988; 7: 223-41.
- Manns A, Cleghorn FR, Falk RT, Hanchard B, Jaffe ES, Bartholomew C, et al. Role of HTLV-I in development of non-Hodgkin lymphoma in Jamaica and Trinidad and Tobago. *Lancet* 1993; 342: 1447-50.
- Nakao K, Ohba N. Clinical features of HTLV-I associated uveitis. *Br J Ophthalmol* 1993; 77: 274-9.
- Mochizuki M, Watanabe T, Yamaguchi K, Tajima K. Human T-lymphotropic virus type I uveitis. In: Holland GN, Pepose JS, Wilhelmus KR, eds. *Ocular infection and immunity*. Philadelphia: Mosby, 1993.
- Uno H, Kawano K, Matsuoka H, Tsuda K. HLA and adult T cell leukaemia: HLA-linked genes controlling susceptibility to human T cell leukaemia virus type I. *Clin Exp Immunol* 1988; 7: 211-6.
- Ryder LP, Anderson E, Sveigaard A. HLA and disease registry. *Tissue Antigens* (Suppl), 1979.
- Badenhoop K, Schleusener H, Henning Usadel K. Immunogenetics of endocrine ophthalmopathy and Graves' disease. In: Kahaly G, ed. *Endocrine ophthalmopathy: molecular, immunological and clinical aspects*. Basel: Dev Ophthalmol 1993; 25: 11-9.
- Usuku K, Sonoda S, Osame M, Yashiki S, Takahashi K, Matsumoto M, et al. HLA haplotype-linked high immune responsiveness against HTLV-I in HTLV-I-associated myelopathy: comparison with adult T-cell leukemia/lymphoma. *Ann Neurol* 1988; 23: S143-50.

Changing concepts in ptosis surgery

In this issue of the journal, the article by J R O Collin and B A O'Donnell draws our attention to a changing concept in the surgery for blepharoptosis. There are many and various techniques for the management of the adjustment of lid height, either for practical optical reasons or for purely cosmetic reasons.¹

An initial foray into the literature allows an easy understanding of the principles behind lid height management, and to the uninitiated the procedures appear to be relatively straight forward. Line diagrams, cadaver dissections, and the occasional prepared coloured slide give a general overview of the work of the ptosis surgeon and an appreciation of its apparent simplicity.

However, in reality there are many frustrated junior and senior doctors who are being confronted with the 'Red Sea' of blood that despite many a prayer does not part, and the final surgical result is indicative of lack of understanding in dissecting techniques. Surgeons who specialise in lid and periorbital procedures have often quite varied approaches to what appears to be a common end result, but despite personal differences and often heated discussion, one constant requirement remains – that is, knowledge of anatomy, which must be combined with a consistent dissecting technique and the ability to know where one is within the 'lid sandwich'. Once this has been mastered, then the various surgical doctrines can be adapted to suit virtually any surgeon. Precise repositioning of a retracted levator aponeurosis or the precise excision of levator and Müller muscle are the features of a successful surgical technique.

However, despite relative consistency, there are patients who do not conform to the standard pattern, and many of the pathologies listed in the article by Collin and O'Donnell exemplify this problem. Such conditions range from degenerative and dystrophic extraocular muscle pathologies to endocrine imbalance resulting in dysthyroid ophthalmopathy. The upper lid can vary in position quite dramatically and with abnormal muscle function the standard ground rules of levator surgery often have to be abandoned.

The adjustable suture technique described offers an expansion in the range of options that the surgeon can call upon when controlling lid height. This is not a new concept, because when the archives are dusted down and examined it is easy to find theories on adjustable suture techniques encompassing all the extraocular muscles dating back a substantial amount of time.^{2,3} It is relatively recently⁴ that the strabismus surgeons have presented the profession with consistent repeatable and successful adjustable suture techniques. The main difference between their current success and their predecessors' failure is the quality and standard of materials available.

The current article underlines the success obtainable with modern equipment, which we often take for granted. The particular style of alloy needle coupled with absorbable strong, yet sleek running suture material is very much a modern development, and I think many of our predecessors would have been well pleased to have had this type of material at their disposal. It is therefore much easier to adopt the principle of postoperative manipulation of soft tissue in an expanding group of patients. The technique, however, may be limited to the patients who are responsive, cooperative, and relaxed and, although the pathology may indicate adjustable suture technique as being the most favourable form of surgery for a reasonable outcome, we must not forget the patients and their wishes and demands. The adjustable suture ptosis surgery technique undoubtedly adds to the surgeon's armoury for lid work.

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- Stewart WB, ed. *Ophthalmic, plastic and reconstructive surgery*. San Francisco: American Academy Manuals Program, 1984: Chapter 14, 160-99.
- Mustarde JC. *Repair and reconstruction in the orbital region*. 2nd ed. Edinburgh: Churchill Livingstone, 1980: Chapter 18, 325-31.
- Jampolsky A. Strabismus re: operation techniques. *Trans Am Acad Ophthalmol Autolaryngol* 1975; 79: 704-17.
- Metz HS. Adjustable suture techniques in strabismus surgery. Focal points 1986. *Clinical modules for ophthalmologists*. San Francisco: American Academy of Ophthalmology, 1986: Vol IV, Module 1.