A Time-saving, Cost-saving and Effective Technique for Pterygium Surgery
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Introduction
Pterygium is a degenerative conjunctival fibrovascular growth which may impede with vision or cause eye irritation. Surgical excision with conjunctival autograft is the treatment of choice, but the conjunctival autograft either requires a time-consuming suturing process, or an expensive fibrin glue, to secure the graft in place. Currently, the waiting list for pterygium surgery is two years at Hong Kong Eye Hospital. A more cost and time effective surgical technique would help reduce the waiting time for this surgery. Recently, the use of a blood clot derived from the patient's autologous blood at the surgical site to secure the conjunctival autograft has been reported with great success, with results comparable to those with sutures and fibrin glue. The initial experience of a single surgeon using this new technique will be evaluated in this study.

Objectives
To compare outcomes of pterygium surgery with conventional suturing with 9-o vicryl (Group 1) and novel technique with autologous blood clot (Group 2).

Methodology
A retrospective review of records was performed. Eyes with more than 1 month follow-up were recruited.

Result
There were 12 eyes in Group 1 and 15 eyes in Group 2. Average follow-up duration was 6.3±4.6 (range, 1-14) months. Operation time was significantly shorter in Group 2 (31.4±7.2 minutes in Group 1 vs 24.9±4.3 minutes in Group 2, p=0.020). Cost to secure the autograft was also significantly lower in Group 2 ($192 per case in Group 1 vs $0 per case in Group 2, p<0.000). Nevertheless, there were no differences in graft
detachment rate (0% in Group 1 vs 13% in Group 2, p=0.487) and recurrence rate
(0% in Group 1 vs 7% in Group 2, p=1.000). There were more transient complications
in Group 2, such as graft edema (0% in Group 1 vs 60% in Group 2, p=0.001) and
dellen (0% in Group 1 vs 20% in Group 2, p=0.231), that would resolve uneventfully
by 1 week. Using autologous blood clot to secure conjunctival grafts in pterygium
surgery seems to be as effective as conventional suturing, and at the same time
saves time and cost for the hospital. The postoperative course is slightly different from
conventional suturing and requires some modification in follow-up regime for these
patients. Constant update of new trends and knowledge from the published literature,
一起 with careful modifications and applications, can lead to better patient care
and wiser use of resources for the hospital.