

Pterybubble: A pneumodissection-assisted technique for pterygium excision and ocular surface reconstruction

Pterybubble: Uma técnica assistida por pneumodissecação para exérese de pterígio e reconstrução da superfície ocular

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Pterygium surgery remains challenging because recurrence, inflammation, ocular surface irregularity, and cosmetic dissatisfaction may occur despite established surgical techniques. Conjunctival autografting is widely regarded as one of the most effective methods for reducing recurrence and restoring the ocular surface following pterygium excision¹. Furthermore, the use of fibrin glue has been associated with shorter

surgery duration and improved postoperative comfort compared to sutures².

Pterybubble is a novel pneumodissection-assisted technique developed to facilitate pterygium excision. This approach creates a controlled surgical plane through air injection, enabling improved tissue separation while preserving adjacent structures and optimizing preparation of the recipient bed. By ena-



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Received on: March 3, 2026. **Accepted on:** April 6, 2026.

Funding: No specific financial support was available for this study. **Conflict of interest:** None of the authors have any potential conflict of interest to disclose.

How to cite: Torquetti L, Coscarelli S, Amorim V. Pterybubble: A pneumodissection-assisted technique for pterygium excision and ocular surface reconstruction. eOftalmo. 2026;12(2):68-9.

DOI: 10.17545/eOftalmo/2026.v12.0014



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bling atraumatic tissue handling, the technique potentially enhances surgical precision and reduces the manipulation of the ocular surface.

An additional advantage of the Pterybubble technique is that it enables the creation of an exceptionally thin conjunctival graft. Such a graft might contribute to improved postoperative cosmetic outcomes and greater patient comfort. Previous studies have demonstrated that air-assisted graft harvesting techniques can yield thinner conjunctival grafts than conventional manual dissection methods^{3,4}.

Reduced graft thickness facilitates smoother ocular surface reconstruction and potentially decreases the risk of recurrence when combined with conjunctival autografting^{1,5}.

This video manuscript presents the surgical concept, key technical steps, and potential advantages of Pterybubble as an adjunctive innovation in pterygium surgery.

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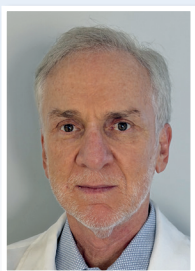
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