A prospective analysis of operative complications with: the Hansatome & the Zyoptix XP® Keratome.

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Financial Disclosure

 Bausch and Lomb provided the Zyoptix XP_® Keratome to the author for the trial

Purpose:

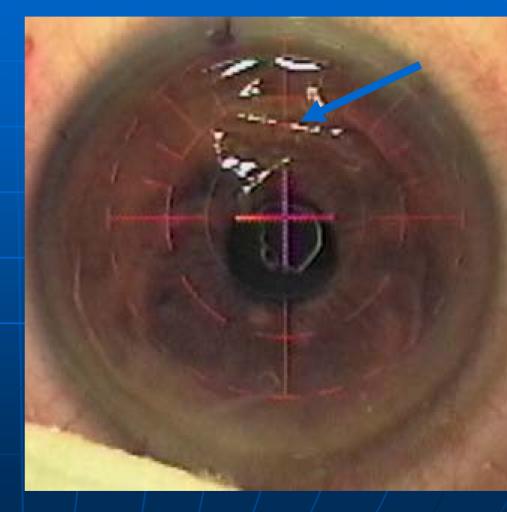
- To compare the safety of the new B&L Zyoptix XP Keratome with a standard Hansatome.
- To assess the effect of the new Keratome on clinical practice

Methods

- A prospective study was initiated with the introduction of the Zyoptix XP keratome. The two keratomes were used alternately on 350 patients (700 eyes).
 - The Hansatome Z18 plate or the Zyoptix 140 plates were used.

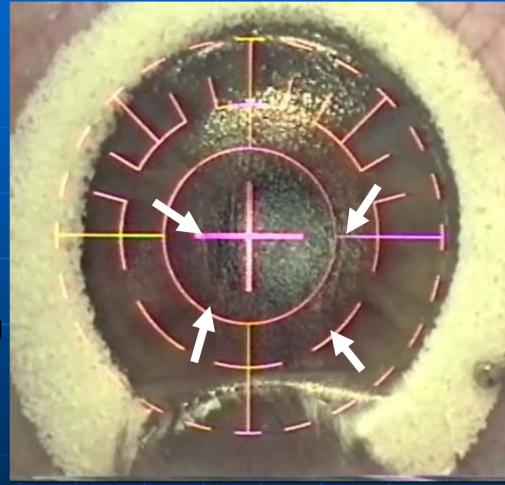
Epithelial Defects

 All patients that had definite epithelial slippage or defect in the central or inferior flap had a contact lens applied at the time of surgery.



Microstriae

Microstriae are defined as those significant enough to be drawn on the clinical record on any visit



Microstriae noted in the bed during an enhancement

Results: Epithelial

- The most common operative complication was epithelial slippage and / or a small epithelial defect.
- This occurred in 5 of 350 eyes done with the Hansatome and in 3 of 350 eyes done with the Zyoptix XP.
 - These rates were not statistically significant.

Results: Microstriae

- 5.3% with the Hansatome
- 7.1% with the Zyoptix XP
 - Not statistically significant
 - No cases of associated loss of best corrected vision

Results

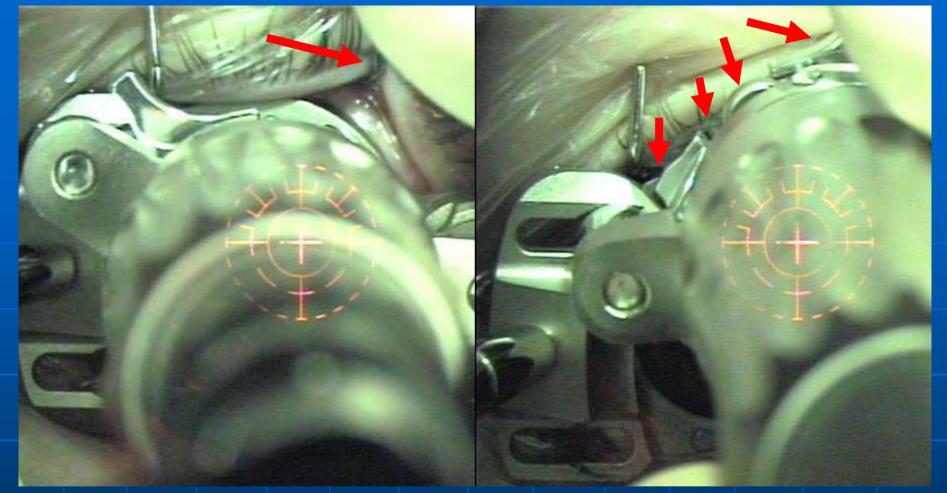
- No patient lost two or more lines of best corrected vision.
- There were no cases of lamellar keratitis or other significant complication.

Flap stability

 There were no cases of slipped flap or clinically significant folds requiring a re-float of the flap

Poor flap/suction

- Poor suction was noted in one eye with the Hansatome and the case was converted to surface ablation.
 - Related to decreased depth of the inferior and nasal fornix
- An irregular flap was noted in one case with the Hansatome and the case was aborted.
 - Related to tight lids



Use the 4th finger to hold the temporal end of the wire speculum down and out

Before the pass check the position of 1.footplate, 2.blade opening, 3.rounded edge and 4.extention

Conclusion

The Zyoptix XP can be safely incorporated into clinical practice.