RECOMMENDATIONS

1. RGP lenses should be tried for every keratoconus patient who is candidate for wearing contact lenses.

2. Different trial lenses designs should be available to select the most appropriate lens for keratoconus patient.

3. Every practitioner should develop his own nomogram regarding the selection of the first trial lens based on the keratometry reading, trial set and fluorescein pattern and the manufacturer recommendation.

4. In cases where adequate fit could not be obtained with the traditional lenses that have fixed back optic zone diameter and lens diameter, another design with variable lens back optic zone diameter and lens diameter should be tried.

5. Studies with larger number are recommended to detect the best BOZD/Lens diameter and cone diameter relationship that gives the best fit.

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الملخص العربى

القرنية المخروطية هو مرض يبدأ المرض فى سن البلوغ ويستمر فى الترقى لمده عشرة الى خمسة عشر عاما. هذا المرض يصيب هيكل القرنيه بالترقق والبروز وينتج عن ذلك استيجماتيزم غير منتظم مما يؤثر على حدة الأبصار بدرجات متفاوتة. أربعة وسبعون بالمائة من المرضى لا يحتاجون الى أجراء عمليات جراحية بينما يحتاج ستة وعشرون بالمائة لأجراء عملية ترقيع للقرنية.

أختيار العدسة الصلبة الملائمة لمرضى القرنية المخروطية قد يتطلب تجربة العديد من العدسات قبل الوصول للعدسة الملائمة للمريض. استخدام جهاز قياس تضاريس القرنية فى تشخيص القرنية المخروطية هو استخدام شائع ولكن استخدامه فى تحديد معالم العدسات الصلبة مثل قطر المنطقة البصرية الخلفية و قطر العدسة وعلاقتهما بشكل و مساحة المخروط غير شائع.

كان الغرض من هذه الرسالة هودراسة العلاقة بين قطر المخروط و قياس أقصى تحدب للقرنية وكذلك العلاقة بين قطر المخروط وكل من قطر المنطقة البصرية الخلفية وقطر العدسة. أشتملت الدراسة على أربعين عين تعانى من القرنية المخروطية. تم تشخيص المرض بناء على نتيجة الفحص الأكلينيكى وفحص قياس تضاريس القرنية. تم أستبعاد المرضى ذوى تاريخ أصابة بأمراض أخرى للعين، الغمش(كسل العين) ، جراحات سابقة أو أصابات سابقة للعين.

تم اجراء الفحص الأكلينيكى وقياس تضاريس القرنية لكل الحالات. تم استخدام خريطة نصف القطر التماسية لتحديد موضع وقطر المخروط. انقسمت المخاريط الى نوعين : حلمى و بيضوى.

لقياس قد المخروط تم استخدام فرجار للشاشة يوضع فوق خريطة تضاريس القرنية للحصول على مقياس قطر ذروة المخروط وقطر المخروط الأجمالى. تم دراسة قطر المنطقة البصرية الخلفية وقطر العدسة وعلاقتهما بقطر المخروط بنوعية الحلمى والبيضاوى.

تم الخروج من هذه الدراسة بالنتائج الآتية:

- متوسط قطر ذروة المخروط البيضاوى ٢.٨٩ ± ١.٢٤ سنتيمترا بينما كان متوسط قطر ذروة المخروط الحلمى ٢.٤٤ ± ٠.٨٩ سنتيمترا.
- متوسط قطرالمخروط البيضاوى الأجمالى ٨.٣١ ± ١.٢١ سنتيمترا بينما كان متوسط قطر المخروط الحلمى ٧.٧٥ ± ١.٢٥ سنتيمترا.
- لم يكن هناك أعتداد أحصائى بين المخروط الحلمى والبيضاوى بالنسبه لقطر المخروط.
- يوجد ترابط سلبى بين قطر ذروة المخروط و قطر المنطقة البصرية الخلفية . هذا الترابط كان له أعتداد أحصائى فى مجموعة المخاريط الحلمية.
- لا يوجد أعتداد أحصائى بين المخروطين الحلمى والبيضاوى من حيث قطر العدسة وقطر المنطقة البصرية الخلفية.
- يوجد ترابط أيجابى بين قطر المخروط الأجمالى وقطر المنطقة البصرية الخلفية. هذا الترابط كان له أعتداد أحصائى فى مجموعة المخاريط البيضاوية.
- يوجد ارتباط سلبى بين قطر ذروة المخروط وقطر العدسة . هذا الترابط كان له أعتداد أحصائى فى مجموعة المخاريط الحلمية.
- يوجد أرتباط أيجابى بين قطر المخرط الأجمالى وقطر العدسة. هذا الترابط كان له اعتداد احصائى فى مجموعة المخاريط البيضاوية

<u>الأستنتاجات:</u>

- استخدام جهاز قياس تضاريس القرنية لتحديد نوع المخروط وقطره ممكن أن يساعد فى عملية أختيار العدسة الصلبة الملائمة للمريض.

- العدسات الأصغر قطرا التى تتميز بصغر قطر المنطقة البصرية الخلفية تتمركز بشكل أفضل فى حالة المخاريط المتقدمة.

الأرتباط بين معايير طوبوغرافيا القرنيه ومعايير اختيار العدسات الصلبه المنفذه للغاز لتثبيت القرنيه المخروطيه

رسالة مقدمه

إلى كلية الطب-جامعة الأسكندرية

ايفاءا جزئيا للحصول على درجة الدكتوراه

فى طب وجراحة العين

من

شهيره رشاد خضرى محمود

بكالوريوس الطب والجراحه ، الأسكندرية

ماجيستير طب وجراحة العين ، الأسكندرية

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