#### **Patient Information Brochure**

### **Q:** What is Keratoconus?

**A:** In Greek, keratoconus means "cone-shaped cornea." Keratoconus is an eye condition in which the regularly dome-shaped cornea bulges outwards and thins over time.

## Q: When do you get Keratoconus?

**A:** Symptoms are typically first noticed in the late teens or early 20's and tend to progress slowly over the next 10 to 20 years. Keratoconus occurs in approximately 1 in 2000 people and is usually present in both eyes.

## **Q:** What causes Keratoconus?

**A:** In most cases the cause is unknown. A gradual weakening of corneal tissue is thought to lead to the condition. About 10% of people with keratoconus have a family history of the condition. Vigorous and prolonged eye rubbing due to childhood allergy has also been associated with keratoconus. It is slightly more frequent in severe asthma or eczema and patients with chromosomal disorders such as Down's syndrome quite often have keratoconus

## Q: What are the symptoms of Keratoconus?

**A:** Depending on the rate of progression and severity, keratoconus can have mild to severe effects on your vision. One eye is often affected more than the other.

Early symptoms of keratoconus may include				
☐ Mild blurring and distortion of vision				
☐ Sensitivity to light				
☐ Glare				
☐ Mild eye irritation				
☐ Eye strain				
Symptoms of more advanced keratoconus may				
include:				
☐ Increased blurring and distortion of vision				
☐ Increased nearsightedness or astigmatism				
☐ Frequent eyeglass prescription changes				
☐ Sensitivity or intolerance to contact lenses				

## Q: Diagnostic Tool

Diagnostic equipment includes a cornea topographer

It makes a three dimensional color coded map of the cornea surface and accurately measures the keratoconic protrusion. It helps to track the progression of cone.

#### Q:What is the treatment of keratoconus?

The methods of treatment include

SPECTACLES - In early cases glasses with properly prescribed cylindrical error suffices in most patients. Upto -4 diopter cylinder can be given in glasses.

CONTACT LENS - When glasses become ineffective, the next step is to try contact lenses to improve vision. These are usually hard (rigid gas permeable or "RGP") lenses. Especially designed customized contact lens (Rose K lenses) are advised for advanced difficult to fit cones.

Lifelong wear is necessary.

Unfortunately it may be difficult to fit a contact lens over the protrusion and wearing it may be uncomfortable.

# Corneal Ring Segment (INTACS) - What?

These are tiny transparent semicircular acrylic implants that are precisely placed within the cornea to make its shape more regular and to flatten the central cornea, a beneficial effect for people with keratoconus

## Why?

The best use of intrastromal implants (Intacs, Kerarings, Ferrara rings) is for people with moderate keratoconus who require hard contact lenses for good vision. Implants are likely to improve contact lens comfort. these can be combined with collagen cross linking.

## **CORNEA TRANSPLANTATION**

