SUMMARY

The present study was undertaken to compare the induced astigmatism and final postoperative visual acuity in patients undergoing extra capsular cataract extraction with posterior chamber lens implantation.

The patients numbering sixty were selected from the ophthalmology out patient department of M.L.B. Medical College, Jhansi and were randomly put into two groups of thirty each with one group undergoing conventional procedure and the other sutureless scleral tunnel procedure.

Keratometric and A Scan Biometric evaluation was done preoperatively and the calculated power of intraocular lens implanted. Post operative keratometry was done on two, four and six weeks and visual acuity noted at six weeks, both unaided and aided (after spectacle correction).

The results obtained showed that there was a general trend of induced astigmatism towards against the rule with
steepening of the horizontal meridian in conventional procedure as compared to flattening of vertical meridian in sutureless procedure. The induced astigmatism was less (in the range of less than one dioptres) in sutureless procedure as compared to higher astigmatism (in the range of one to two dioptres) in conventional procedure.

Thus larger number of patients reached neutrality in sutureless procedure because with rule astigmatism was seen in most patients preoperatively. A few patients also reached neutrality in conventional procedure also, but larger number had against rule astigmatism because of larger induced astigmatism even though most patients had with rule astigmatism preoperatively.

There was an early stabilisation of astigmatism in sutureless procedure. However the aided visual acuity in both groups was comparable and having no significant difference.
Thus from the above it is evident that extracapsular cataract extraction with posterior chamber lens implantation using the scleral tunnel sutureless incision is safe and more effective method than the conventional procedure giving good visual outcome and lesser postoperative induced astigmatism and an early recovery.