

STEROID INDUCED RISE OF IOP FOLLOWING CATARACT SURGERY

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STEROID INDUCED GLAUCOMA

o This paper on the risks of Raised I.O.P. in post operative use of Topical Steroids, is based on work between Aug. 2001 to Oct. 2002.

Criteria for inclusion

- o N.C.T reading between 12 to 20 mm Hg on admission
- o Cooperative and punctual for all 4 follow ups on day two , day 10, day 30 and day 45

Exclusion

o Diabetics, Myopes above 5D, Glaucomatous, & ,suspects ,use of steroid by any route for any reason
operative complication on table

Surgery

o At random,Phako, sandwich ,ECCE with PC IOL .was done Miotic or mydriatic not used, A.C form
lactate solution Sub conj. Decadron ¼ cc given

Post operatively Drug Schedule

1. first and Second dressings day one and two-Homide.Dexameth.10 times a day
 2. From Day 3 to day 10. Dexa.10 times
 3. Day 11 to day 30 Dexa 6 times a day
 4. Day 31 to 45 ,dexa 4 times a day
- IOP on days 2nd. and 11th,
IOP on days 30th and 45th

Observations IOP measurements

(A)Period of Raised Intraocular Pressure over 20. mm Hg

(B)Period of Raised Intraocular Pressure over 20. mm Hg

o In 21 out of 24, IOP dropped to their original when Steroid was stopped. 3 cases persisted with 7mm Hg at the last exam on day 45 ,were put on Beta blocker for 3 Wks further .

Management of Steroid glaucoma

o discontinuation of the drug by the earliest . IOP generally returns to normal within a few days to
rarely it may take months .

Alternative to steroid drops?

- o medrisone, Fluorometholone, and a recent product rimexalon.
- o Unlike steroids these three agents have the least effect on IOP.

Discussion - steroid effect

o Genetic --probably a recessive homozygous gene

(1) Mucopolysaccharide accumulate in the aqueous outflow pathways, causing resistance

(2) Inhibition of prostaglandins E & F which normally lower the IOP by increasing the outflow facility

(3) Reduced phagocytosis of debris by the Endothelial cells from trabecular meshwork

Conclusion

o In our series of 150 we had 24 cases of raised IOP. An unexpected & unacceptable 16.%.
o Every case of steroid therapy for any reason & by any route calls for extreme vigil for possible ri