CONCLUSION
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The conclusions drawn from a comparative study of the effect of 2% lignocaine hydrochloride with adrenaline ± hyaluronidase at 3 different pH in peribulbar block technique of ocular anaesthesia for cataract surgery are as follows:

1. Raising the pH of 2% lignocaine hydrochloride with adrenaline and hyaluronidase solution from 3.45 to 6.5 produced a definite reduction in the onset of akinesia.

2. Alkalinized lignocaine hydrochloride with adrenaline alone or lignocaine hydrochloride with adrenaline and hyaluronidase without alkalinization were not as effective as a solution containing alkalinized lignocaine hydrochloride with adrenaline and hyaluronidase.

3. The duration of block was comparable in all 3 groups.

4. More cases achieved complete akinesia in the alkalinized lignocaine hydrochloride with adrenaline + hyaluronidase group.

5. Alkalinized lignocaine hydrochloride with adrenaline + hyaluronidase was more efficacious than the other two solutions. Therefore need for supplement injections was reduced in this group.
6. Vertical movements were the first to go; medial movement was the last to go.

7. Alkalinized lignocaine hydrochloride with adrenaline solution, without hyaluronidase resulted in lid edema and conjunctival chemosis.

8. All solutions had comparable systemic safety profiles.

Therefore alkalinized lignocaine hyaluronidase solution is found to be superior to the other two solutions. A solution as efficacious as this minimizes the likelihood of supplementary injections, thereby preventing the added risk with each prick. Alkalization is safe as no untoward systemic side effects were noted.

Also hyaluronidase can be used more effectively if the solution is alkalinized to near physiologic pH. Hyaluronidase can be excluded from the injectate avoiding its rare allergic complications, if the solution is not being alkalinized.