## Pain-free cataract surgery in patients with cardiac risk

## Dear Editor,

We read with great interest, the article by Gupta *et al.*, "Cataract surgery under topical anaesthesia using 2% lignocaine jelly and intracameral lignocaine: Is manual small incision cataract surgery (SICS) comparable to clear corneal phacoemulsification?"<sup>[1]</sup> It is concluded that both phacoemulsification and SICS can comfortably be done under the above-mentioned technique of anesthesia without compromising surgical results.

We agree with the author's observations and would like to share our experience regarding 2% lignocaine jelly and intracameral lignocaine 2% in medically high-risk cardiac patients, which we are practicing for the last few years for performing, SICS.

Few common conditions for which patients were labelled as high risk by physician are ectopics, beats, bundle branch blocks, ejection fraction, sinus tachy or bradycardia, arrhythmias, old myocardial infarction and ischemic heart disease.<sup>[2]</sup> The age group of patients having cataracts is vulnerable for having cardiac problems.<sup>[2]</sup> In community ophthalmic outreach program like ours, where the patients come from rural and tribal areas, the cardiac changes may often be silent of which, the patient and relatives are unaware of. Many of these patients do not have accompanying relatives for conveying intraoperative risk. Still, the patients need to be operated, taking the risk for surgery.

Unfortunately, many of our rural and tribal patients cannot afford the investigations required for preoperative cardiac fitness and for Cardiac medication as well. Sympathizing with such patients in an attempt to offer vision, the surgeon is often forced to operate on them with undue risk. If such patients are sent back without surgery for the same, they are eventually lost to follow up and gradually become blind. They are not often not cared for by family members and lead a miserable life.

To overcome this problem, we take patients for surgery under topical anaesthesia, with the help of stand by anesthetist. The fear in cataract surgery is vasovagal attack or anaphylactic reaction after peribulbar or retrobulbar block, anxiety about the surgery and oculocardiac reflex which may affect an already compromised heart leading to further systemic complications or even death.

General anesthesia in these cases has its limitations and risks because of hemodynamic changes.<sup>[3]</sup> Therefore, in such patients we resorted to using 2% lignocaine jelly and intracameral preservative free 2% lignocaine injection, which is relatively a safe drug for cardiac patients. In addition, we prefer to infiltrate the same xylocaine into the sub tenon's area below and above the incision site to stabilize the vertical movement of eye, for the temporal incision technique that we commonly practice. This is important in those who might not follow commands to cooperate, with some being deaf. Talkaesthesia or hand holding of the patients (gently talking to patients to reduce anxiety and gain their confidence) usually helps.<sup>[4,5]</sup> All the cases were done by senior trained surgeons and the average surgical time was less.

We prefer not to take a fixation suture. Thus, the risk of

oculocardiac reflex due to handling of muscles may further be prevented. This type of anesthesia is tolerated well by the patients. The majority of surgeries turn out to be uneventful. Since the data on topical anaesthesia for cataract surgery topical phaco is routinely being practiced by many surgeons on patients with cardiac risk is inadequate from India, we would be interested to perform multicentric studies and gather substantial data to confirm our findings.

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