

Commentary: Viral serology testing before cataract surgery: Where do we stand?

Cataract surgery is one of the most common surgeries performed on the human body. Although there has been a revolution in cataract surgery, still sharp instruments and needles are used in cataract and other ocular surgeries. So, there are chances of needle prick or sharp instrument injury during the procedure also. The study by Mishra D, *et al.*^[1] shows the test result of viral serological marker before cataract surgery, so there is a chance of cross-infection if we do not take proper precautions. Although the reported incidence of needle prick injury in ophthalmological practice was 0.06–0.08 per 1,000 surgeries in our country, it cannot be taken lightly considering the severity of the disease.^[2]

In India, although femtosecond laser cataract surgery reached a few cities, manual small-incision cataract surgery (MSICS) is a major chunk of the surgical mode of cataract extraction due to the cost-effectiveness and lesser learning curve in comparison to phacoemulsification.^[3] In MSICS, there is a chance of minor bleeding during peritomy and the making of the sclero-corneal tunnel. So, there is a chance of cross-infection to surgeons, nurses, other staff, and patients if the status of the operating patient is unknown to all. At the same time, when a patient is a known case of Human Immunodeficiency Virus (HIV), Hepatitis C Virus (HCV), or Hepatitis B Virus (HBV) infection, all take universal precautions along with special disposable gowns with headcover and goggles, double gloves, and unique waste management is done for that also. Even to prevent cross-infection to other patients, such patients are operated upon last in the operation theatre (OT) to minimize the cross-infection. This is the benefit of knowing the serology status of the patient beforehand. Nowadays, the test percentage has definitely increased from the previous years but still, all operating surgeons or hospitals are not practicing this sometimes due to cost issues of the patient or due to less importance given to this fact. Some advocated doing universal testing or selective testing of a particular viral marker according to the prevalence of that virus in that population for cost-effectiveness.^[4] But in our opinion, there should be universal screening for all these three viral markers hepatitis B, hepatitis C, and HIV, considering the severity of the diseases to human life.

As acquired immunodeficiency syndrome (AIDS) due to HIV is one of the severe and leading causes of death, and a social taboo persists among the populations, the United Nations AIDS (UNAIDS) program had a target of 90-90-90: By 2020.^[5] It means, 90% of all the people living with HIV will know their HIV status by 2020, 90% of all the people with diagnosed HIV infection will receive sustained anti-retroviral therapy (ART), and by 2020, 90% of all the people receiving ART will have viral suppression. This can be accomplished by various guidelines and work up from the government and non-government organizations (NGOs) like awareness programs. As cataract surgery is one of the highest surgeries done across the world, if we screen all before surgery, then as an ophthalmologist,

we can also contribute to this first 90 of the 90-90-90 target of UNAIDS. So that at least if anyone is detected positive, they can be treated, and it prevents both the horizontal and vertical transmission. The same applies to both hepatitis B and C. At least the positive patient can be evaluated for their complete viral antigen and antibody profile and the liver status so that the severe terminal disease can be prevented if detected early. By this, an ophthalmologist can add the service of a general physician to a patient in addition to their service toward ocular health.

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References

- Mishra D, Singh H, Gogate P, Bhushan P, Singh MK, Srivastav T, *et al.* Prevalence of incidental and total human immunodeficiency virus, hepatitis B and hepatitis C seropositivity among patients posted for cataract surgery at a tertiary care center in India. *Indian J Ophthalmol* 2022;70:400-4.
- Rishi E, Shantha B, Dhama A, Rishi P, Rajapriya HC. Needle stick injuries in a tertiary eye-care hospital: Incidence, management, outcomes and recommendations. *Indian J Ophthalmol* 2017;65:999-1003.
- Singh K, Misbah A, Saluja P, Singh AK. Review of manual small-incision cataract surgery. *Indian J Ophthalmol* 2017;65:1281-8.
- Rewri P, Sharma M, Vats DP, Singhal A. Seroprevalence, risk associations, and cost analysis of screening for viral infections among patients of cataract surgery. *Indian J Ophthalmol* 2018;66:394-9.
- Global Burden of Disease 2015 HIV Collaborators. Estimates of global, regional, and national incidence, prevalence, and mortality of HIV, 1980-2015: The Global Burden of Disease Study 2015. *Lancet HIV* 2016;3:e361-87.

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Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_2484_21

Cite this article as: Nayak B, Bhatt B. Commentary: Viral serology testing before cataract surgery: Where do we stand? *Indian J Ophthalmol* 2022;70:405.