Intracameral phenylephrine 1,5% for prophylaxis against intraoperative floppy iris syndrome

Dr Ramón Lorente, MD, PhD

The key points of this talk are:

I. The efficacy of intracameral 1,5% phenylephrine (IPH) as prophylaxis against IFIS. Based on a prospective randomized comparison of fellow eyes undergoing cataract surgery (1). Please, find attached the study published on Ophthalmology.

Video 1 and 2: right and left eye of the same patient on tamsulosin. One eye receives intracameral phenylephrine at the beginning of surgery and the fellow eye is not treated with the drug. IFIS develops in the second eye while surgery is uneventful in the first one.

Video 3: Patient on tamsulosin, with a very hard cataract and high parameters who does not develops IFIS after pretreatment with phenylephrine.
II. The ability of intracameral phenylephrine to reverse IFIS. As the study shows, the drug can reverse IFIS, restoring iris rigidity and causing the pupil to return to its preoperative size.

Video 4: patient who declares that is not under any treatment for prostate. During surgery the pupil contracts, iris billows and prolapses. After intracameral injection of 0.6 cc of 1.5% phenylephrine the pupil recovers its original size, and there are no more prolapses or billowing.

III. Pupil dilation. In these patients, the injection of 0.3 cc of lidocaine 2% and 0.6 cc of 1.5% intracameral phenylephrine achieved a dilation similar to mydriatic drops, which is maintained during surgery. At this moment we no longer administer midriatic drops before surgery any longer.
Video 4: two cases showing how pupils dilates under the effect of a combination of lidocaine 2% and phenylephrine 1.5%.

IV. Possibility of stretching the pupil after intracameral phenylephrine administration. We will show the videos with the results in 6 patients. In 5 of them there were no signs of IFIS and in 1 case, a prolapse occurred during hydrodissection. (Videos 5 and 6)