

Ophthalmic abbreviations: “I” will save time, but will “eye” be mistaken?

Abstract

Ophthalmic abbreviations are common and not readily recognized by other physicians. They may save time, but also may lead to medication errors, mistaken diagnosis, and unnecessary confusion.

Keywords: ophthalmic abbreviations, medical documentation, medication errors, computerized autocorrection

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Introduction

The use of Medical Abbreviations has been in existence for over 200 years and while initially limited to writing prescriptions, they have now become common in all aspects of medical documentation¹. Abbreviations represent a method to conveniently communicate complex medical issues in limited space. Ophthalmologists have been known to not only extensively utilize abbreviations, but also employ a set of abbreviations not readily recognized by other physicians.

Take the following example: 45 YO WF w/PDR, VH, NVI, NVD, NVE+TRD OU w/ VA CC of LP (-)RAPD s/p PPL, PPV, MP, EL+AFx Which translates to a very verbose: Forty five year old white female with history of proliferative diabetic retinopathy, vitreous hemorrhage, neovascularization of the iris, neovascularization of the optic disc, neovascularization of the retina elsewhere and tractional retinal detachment of both eyes with a visual acuity with optical correction of light perception with no relative afferent defect who is status post pars plana lensectomy, pars plana vitrectomy, membrane peel, endolaser treatment and air-fluid exchange.

Physicians are experts in converting the most complex medical terms into abbreviations. While this may work well when your teenager is texting a message on their cell phone, it unwittingly could lead to potential deadly or sight threatening situations. At the very least, the intended realm of information may be misconstrued. Does CR mean cycloplegic refraction or chorioretinal? Does OD refer to the right eye or the optometrist? Does DR refer to the MD or diabetic retinopathy? Does PE refer to pulmonary edema or pulmonary embolism? Does BE refer to both eyes and barium enema? Does DOA refer to Date of Admission or Dead on Arrival? When ordering an OCT, do you mean ocular coherence tomography or oxytocin challenge test? Does SLE refer to slit lamp examination or systemic lupus erythematosus? Does PCO refer to posterior capsule opacity or polycystic ovaries?

Most medical errors that are the result of abbreviations involve medication errors? From 2004-2006, almost 30,000 medication errors were attributed to abbreviations.¹ Medications written for OD, OS, or OU have been mistaken for AD, AS, or AO causing a medication to be

administered in the ear instead of the eye. Medications prescribed once daily (OD) have been given in the right eye. MTX for methotrexate has been confused for mitoxantrone and MS for Morphine has been mistaken for Magnesium. A case has been reported in the literature of a 10 year old boy receiving an oral ketotifen solution to his eye instead of an ophthalmic solution resulting in keratopathy.² There have been multiple cases of patients receiving an antibiotic when a combination antibiotic/steroid drop was actually intended (i.e. tobrex instead of tobradex). The US Institute of Safe Medication Practices and Joint Commission offer updates on the safe use of medical abbreviations. Many electronic medical record systems will autocorrect certain abbreviations by writing out the full name. Computerized alerts has been suggested as a means to combat this rampant problem.³ Despite these warnings and precautions, abbreviations are rampant throughout medical charts and prescriptions.¹ The danger of medical abbreviations is the failure to communicate and this poses a special problem with Ophthalmic abbreviations. In my experience, non-ophthalmic health care workers are not familiar with eye abbreviations and cannot begin to understand what the eye exam/treatment/recommendations mean.^{2,3}

In addition, many non-ophthalmic health care workers when documenting the “eye” exam, simply write PERRLA (indicating that the pupils are equal round, reactive to light and accommodation). This does not offer much information about the eyes or even key data regarding pupillary function (no indication if a relative afferent pupillary defect is present or if there is anisocoria in the dark which could indicate Horner’s syndrome). In addition it is very rare that the person recording “PERRLA” has really checked the size of the pupils when the patient is accommodating. Even ophthalmic health workers medical degree abbreviations (the letters following the physician’s name) are confusing to patients and other health care workers. Most understand MD refers to medical doctor, but OD (optometrist) and DO (Doctor of Osteopathic Medicine) can be very confusing to patients, especially since a DO may be an ophthalmologist. It is possible for someone to be both OD and DO. Patients are already confused regarding the difference in ophthalmic health care providers, and the initials after our names may not be helping the matter.

Conclusion

In summary, abbreviations are often created to save time, space, and needless writing/typing, but can confuse and lead to errors and mistakes. If a patient’s sight or life is on the line, the extra time to avoid abbreviations is time well spent.

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Conflicts of interest

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