History of ophthalmology

On manual dexterity

Eye surgeons need a degree of manual dexterity, and by and large this occurs by a process of natural selection. For some reason this wasn’t so in Prague in the 1940s, as shown by the following revealing quote from Professor Loewenstein’s lecture at the Tennent Institute of Ophthalmology: ‘Having seen many young men starting ophthalmology, I am amazed by the surprising fact that our profession (which by general consent requires at least moderate skill and dexterity) appears in Czechoslovakia to attract like a magnet the most adexterous people. One cannot explain this dark riddle of nature, but is it wrong to exclude any person on the grounds that he is handler?’ After discussion, the lecturer concluded that ophthalmology must ‘examine the beginner, admit the gifted, and refuse the less able.’ A debatable point!

Loewenstein’s own teacher Elschnig fostered ambidexterity by insisting that pupils operated on the left eye with the right hand, and vice versa. There must have been times when this affected the outcome of more delicate operations. Believing that ‘all finger work aided eye work,’ he had his trainees ‘exercising the fingers like a pianist’ and cutting minute pieces of cotton wool with De Wecker’s instrument (instead of having a rest and a coffee) between cases.

H B Stallard, author of the famous surgical text, also considered the question of dexterity, but held the opinion that one’s natural talents could be considerably improved by practice. He advocated cutting individual hairs off the opposite forearm with scissors, and though this would result in a peculiar appearance in the hirsute, it undoubtably improves dexterity. He also suggested that removing foreign bodies from a dead animal’s cornea was beneficial to the budding eye surgeon, but unfortunately gave no hints as to the source of the animals.

Even when dexterity is accomplished, it may depend on circumstance, varying inversely with the size of the audience and the importance of the operation. A famous ophthalmologist in the 1930s was aware of the deleterious effect of the ‘gallery’ on his manual skills, and used to dread important cases. He adopted the solution of arriving fifteen minutes before the appointed time, in the hope of rushing through the procedure before the eminent arrived.

Modern literature again mentions the use of dead cow and sheep eyes in training, and this may become more widespread. (But with increasingly tight budgets, who will pay the butcher’s fee?)

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Gayre Morgan O. The education of an ophthalmic surgeon. 
Loewenstein A. The education of an ophthalmic surgeon. 