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## Occupational eye hazard of Renaissance sculptor Benvenuto Cellini and the recurrent theme of pigeon's blood

Benvenuto Cellini (1500–71), an Italian sculptor, is known for his bronze sculpture 'Perseus with the Head of Medusa', which is now located in the Loggia dei Lanzi in Florence. Cellini also wrote a famous autobiography in which the following occupational eye injury is described [1] occurring when Cellini worked with his sculpture 'Narcissus' in the 1540s.

"One morning I was preparing some small chisels for my work on it, and an extremely fine splinter of steel flew into my right eye, and it was so far embedded into my pupil that I could not find a way to remove it. I thought for certain that I would lose the sight of that eye. After several days I summoned Master Raffaello de' Pilli, a surgeon who took two live pigeons, and making me lie on my back on a table, he took the pigeons, and with a little knife, pierced a large vein they have in their wings so that the blood ran into my eye; I immediately felt relief as a result, and in the space of two days the steel splinter came out and I remained free of pain and my vision improved."

The type of Cellini's ocular injury was most likely a superficial corneal foreign body. It is unclear how common this type of injury was in the Renaissance, but nowadays it is the most common occupational ocular trauma associated particularly with grinding [2], a work Cellini was performing before the injury. No contemporary practitioner of medicine would suggest using living pigeon's blood but it has been used as a treatment since antiquity and is found as a remedy for eye diseases in *Naturalis Historia* by Pliny the Elder (d. 79) [3]. Fresh pigeon's blood, especially as a cure for eye injuries, is also mentioned in *De Materia Medica* by Dioscorides (d. 90) [4], which was the principal book on herbs and other remedies in Europe for over 1500 years.

The unifying theoretical principle for these remedies was provided by Galen (b. 129) in his doctrines of humoral medicine [5]. Treatment consisted of finding a medicine with qualities that counterbalanced the disease. Since the eye itself was considered a phlegmatic organ (cold and wet), the blood of the pigeon

would balance the humors. Interestingly, Cellini does not mention the use of forceps, although Byzantine physician Aetios Amidinos (d. 574) wrote in one of his books that forceps should be used to extract small foreign bodies from the eye [6]. Afterwards, dove's blood should be poured onto the injured eye. Instructions for using pigeon's blood can even be found in late 17th century recipe books, which included not only culinary but also medical information. In Lady Ayscough's recipe book from 1692, pigeon's blood is suggested "For A stroke in the Eyes if there Grow pain thereby or if you be pricked in ye Eyes by any thing" [7].

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Rome-based High Renaissance bronze sculptors include Benvenuto Cellini (1500-1572), creator of the magnificent Perseus (1545-54) and the Flemish genius Giambologna (1524-1608) specializing in classical themes such as Neptune, The Flying Mercury, The Rape of the Sabine Women, Hercules and Nessus. Giambologna had a huge influence on a wide range of pupils and contemporary artists. Colophon: Here end The treatises of Benvenuto Cellini on metal work and sculpture, made into English from the Italian of the Marcian codex by C.R. Ashbee, and printed by him at the Guild's Press at Essex House, with the assistance of Lawrence Hodson who sought to keep living the traditions of good printing refounded by William Morris, the master craftsman, and likewise of T. Binning & J. Tippett, compositors, and S. Mowlem, pressman, who came to Essex House from the Kelmscott Press to that end. Begun April, 1898; finished October, 1898. Noted in Gemology by J. Sinkankas, entry no. 12