

Albrecht Von Graefe's Ophthalmic Educational Visit to William Wilde in Dublin in 1851

M. Ivanišević

Department of Ophthalmology, University of Split School of Medicine, Split, Croatia

Abstract

Aim

There were little information in literature about Albrecht von Graefe's ophthalmological education in Ireland, which was in summer 1851. The aim of this work is to illustrate his stay with Sir William Wilde in Dublin. A brief review of the two giants of ophthalmology also was given.

Methods

Historical search of the data, and the biography of the corresponding ophthalmologists were recorded and analysed. Institutes for history of medicine as well as medicohistorians also were contacted.

Results

Graefe visited Sir William Wilde at the end of his 3-years European ophthalmic educational travels. He learned from him about treatment and examinations of the eye and the skills of various ophthalmic operations, and organization of work in his eye hospital. After that he founded the famous private Eye Clinic in Berlin, and became one of the greatest ophthalmologists of the 19th century.

Conclusion

Graefe's talent, hard work, high quality of education and later continuous contacts with his teachers contributed to modernization and internationalization of ophthalmology.

Introduction

Albrecht von Graefe (1828-1870) was a famous German ophthalmologist who lived and worked in Berlin. He was the first specialist who practiced only ophthalmology and was founder of modern ophthalmology (Figure 1). In his short life he was the first to perform iridectomy to treat acute glaucoma (1857), and created a special knife for cataract surgery (1865). He was the first to use Helmholtz's ophthalmoscope (1851). He founded the first ophthalmological society in the world – German Ophthalmological Society (1857) and the second oldest ophthalmology journal which has been published continuously up to now – Archiv für Ophthalmologie (1854). In 1852 he founded a famous private Eye Clinic in Berlin, where he treated many eye patients and educated many prominent ophthalmologists¹. He achieved all this owing to his talent, hard work and extensive scientific travels to well-known physicians and ophthalmologists in many European ophthalmic centres.

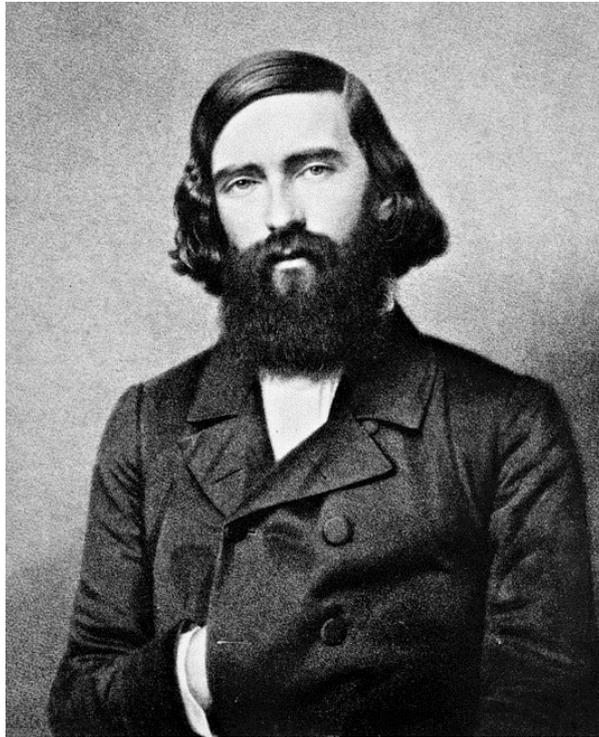


Figure 1. Albrecht von Graefe, aged 32

At the end of his educational travels Graefe visited Sir William Wilde in Dublin in August 1851. There were little information in literature about Albrecht von Graefe's ophthalmological education in Ireland. The aim of this work is to illustrate his stay with Sir William Wilde in Dublin. A brief review of the two giants of ophthalmology also was given.

Methods

Historical search of the data, and the biography of the corresponding ophthalmologists were recorded and analysed. Data from the journal articles, books, letters, internet, old directories and maps of Dublin were used. Institutes for history of medicine as well as medicohistorians also were contacted.

Results

Von Graefe was studied with eminent ophthalmologists of the Continental Europe from 1848 to 1850 and after that he continued his ophthalmic education in the British Isles and first he visited London².

London

23-years old Graefe started from Berlin on a new educational travel to the United Kingdom of Britain and Ireland in summer 1851. He went via German city Kassel and Paris and arrived in London on 13th of July. He traveled with his two brothers Carl and Victor. Graefe lived in London on 19 Church Street in Soho³.

During the Great Exhibition in London Graefe stayed in the oldest and largest ophthalmic centre of the time – Royal London Ophthalmic Hospital (Moorfields Eye Hospital) with two chief eye surgeons William Bowman (1816-1892) and George Critchett (1817-1882).

Graefe, Franciscus Cornelius Donders (1818-1889) from Netherlands and Bowman came to know and met in Moorfields and made close friendship. They had established cooperation from which the foundations of scientific ophthalmology developed⁴.

Glasgow

On the 8th of August early in the morning Graefe left London, took a rail to the Westmoreland county. Then he moved toward mountainous Scotland, where he was hiking for several days. After that he arrived in Edinburgh and then in Glasgow³.

Graefe was staying in Glasgow on the 20th and 21st of August³. In Glasgow he went to see ophthalmologist Sir William Mackenzie (1791-1868) in his Eye Infirmary at the address 14 College Street. When Graefe came to Glasgow, the building was not in a good condition and Eye Infirmary was prepared for removal into 76 Charlotte street, which was finally done in 1852⁵. Mackenzie showed Graefe his Eye Infirmary and informed him about the way of his work.

Graefe sailed from Glasgow toward rocky shore of northern Ireland and later to Dublin.

Dublin

At the end of August Graefe travelled to visit Sir William Wilde and his eye hospital in Dublin.

William Robert Wills Wilde (1815-1876) was an Irish eye and ear surgeon, the father of the writer Oscar Wilde (Figure 2). His career as an ophthalmologist and otologist was impressive. In 1853 he was appointed Surgeon Oculist in Ordinary to the Queen in Ireland and this was the first appointment of that kind made in Ireland, and he was knighted in 1864 becoming Sir. The king of Sweden Carl XV awarded him the Order of the Polar Star in 1862⁶. He treated many famous people of the time, convergent strabismus of the right eye to George Bernard Shaw's father around 1850, cataract to the Swedish king Oscar I in 1854, after whom his son Oscar was named^{7,8}. In 1845, he became editor of the Dublin Quarterly Journal of Medical Science, to which he contributed many articles⁹.



Figure 2. Sir William Wilde, 1847

He founded an Dispensary for diseases of the eyes, ears, and teeth in 1841 on Frederick Lane South (off 11 Molesworth street) in Dublin. In 1844 he founded St. Mark's Ophthalmic Hospital and Dispensary for Diseases of the Eye and Ear on 16 Mark Street, which in 1850 was moved in 32 Lincoln Place¹⁰. Structurally the hospital was large and roomy. Hospital had two lofty well-ventilated wards with twenty beds for ordinary patients, and three private rooms for pay patients. There was also an operating theatre and lecture-room, dispensary, and a large waiting-room for out-patients, kitchen and a quarters for a house staff (Figure 3)⁹. Wilde attended the hospital three days a week treating out-patients, operating two mornings a week, and giving a course of lectures in the winter season^{7,11}.

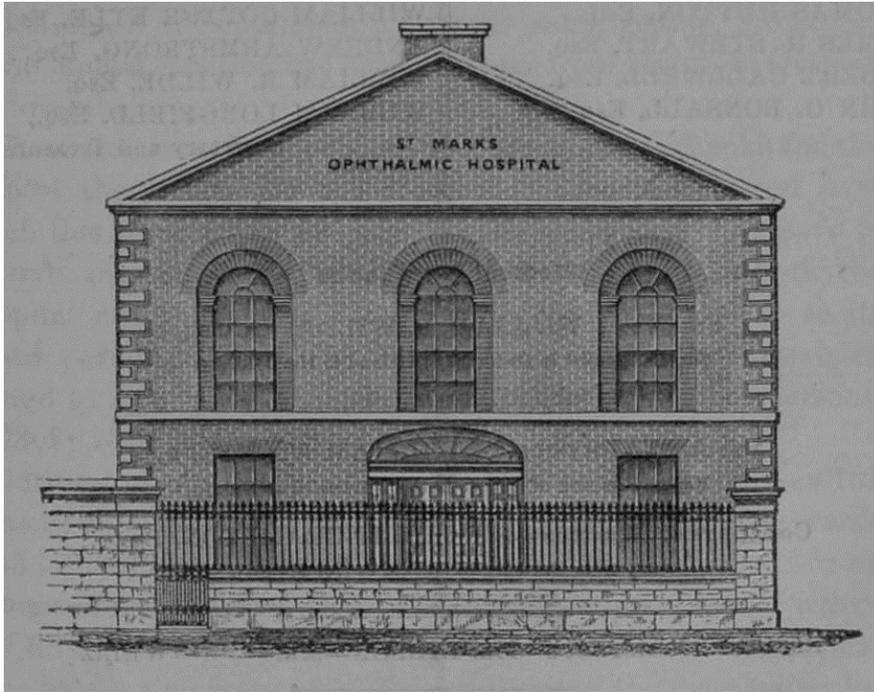


Figure 3. St. Mark's Ophthalmic Hospital in 32 Lincoln Place, Dublin, 1853

His St. Mark's Hospital became the first hospital in Ireland to combine treatment of the eye and with that of ear¹².

Wilde's St. Mark's Hospital became a renowned teaching centre to learn his methods from ophthalmology and otology for local medical students and visiting European and American physicians^{8,13}. Graefe, the famous German ophthalmologist, paid St. Mark a visit in 1851. Wilde had so notable reputation as an ophthalmologist that Graefe would not have thought his *Wanderjahre* complete if he had not come to see the famous surgeon at work¹⁴.

Sir William Wilde lived from 1848 until 1855 at 21 Westland Row, a good 19th century terraced house on four floors with a shiny brass door knocker and pots of geraniums along the sills (Figure 4). Wilde hosted his guest Graefe in his home. During the stay of Graefe, Wilde was living with his sister Margaret who kept house for him^{7,12}.



Figure 4. No. 21 Westland Row, Dublin

Graefe has seen Wilde's ophthalmic hospital, organization of the work and observed various ophthalmic operations.

Wilde claimed to Graefe that 85 per cent of the 120 cases he had operated on for crossed eyes in six years were successful. The Irishman proudly showed his skills and performed several operations for strabismus in front of Graefe. Sir William Wilde worked upon unanesthetized patients, severing the tendon of the internal rectus muscle. He demonstrated to Graefe several more procedures in the treatment of the eye diseases. In trachoma he practiced the expression of the granulations by squeezing them between his thumbnails. For mild cases of trachoma Wilde used the copper sulphate stick or a silver nitrate solution. He also performed various plastic operations for lid deformities. In cataract extraction he followed Jaeger's technique, using the upward incision. Wilde used atropine for iritis, corneal ulcers, but not before cataract operation^{8,15}.

In his eye clinic, at the time of Graefe visit, approximately 200 eye operations were performed per year, and almost 2,500 eye patients were treated. The most common operations were cataract (by extraction and "solution" – discission), tarsal tumours, entopion and trichiasis, lacrimal sac, artificial pupil, staphyloma, ectropion, strabismus, pterygium, enucleation, plastic operations on lids, removal of foreign bodies from eye, absces in eyelid, symblepharon, ankyloblepharon. Colour of the eyes was also noted in every case probably for its bearing on ethnology. Affections of the retina are given as amaurosis^{12,16}.

On Sunday 24th of August, Sir William Wilde carried his guest von Graefe for a drive through Phoenix Park and to St. Patrick cathedral. Wilde's hospitality and his teachings proved valuable to Graefe, who stayed in Dublin more than a week¹⁵.

Ten years later, Wilde sent his son Henry Wilson (1838-1877) as a student of medicine to visit Graefe's clinic in Berlin¹⁷.

After Dublin

At the end of August Graefe came back to London and spent there a week together with his brothers Carl and Victor.

He left London for Paris at the beginning of September and on 15th of September came to Bern. With his older brother Carl, he went to Swiss Alps on mountain chains Monte Rosa and Schesaplana for a month and a half³.

Discussion

During Graefe's stay in Dublin, he saw the work organization of Wilde's eye clinic, medical treatment of eye diseases and various eye operations, especially for cataract, strabismus and trachoma which helped him in his later work¹⁸.

After this journey Graefe opened, in November his famous private Eye Clinic at 46 Karlstrasse in Berlin. He had numerous assistants and pupils from all over Europe and America. Among them the most famous were Douglas Argyll Robertson, Johann Friedrich Horner, Theodor Leber, Richard Liebreich, Henry Rosborough Swanzy, Louis Émile Javal, Edmund Landolt, Julius Hirschberg, Elkanah Williams, Francis Buller¹⁹.

Graefe's ophthalmologic genius is not only the result of his intelligence and hard work but also high quality education at different European ophthalmological centres with the most famous ophthalmologists of that time, among them Sir William Wilde in Ireland. His operative and theoretical knowledge he unselfishly shared with his assistants and pupils who were numerous in his Eye Clinic from 1852 until 1870 when he prematurely died²⁰.

Corresponding Author:

Prof Milan Ivanišević, MD, PhD

Department of Ophthalmology, University of Split School of Medicine, 21000 Split, Croatia

Email: milan.ivanisevic@mefst.hr

References:

1. Rohrbach J. Albrecht von Graefe und die Internationalität. *Der Ophthalmologe*. 2017;114(9):775-80.
2. Heynold von Graefe B. Albrecht von Graefe Mensch und Umwelt. Berlin: Stapp Verlag; 1991.
3. Greeff R. Briefe von Albrecht von Graefe an Seinen Jugendfreund Adolf Waldau. Wiesbaden: Verlag von JF Bergman; 1907.
4. Swartz VJ. Three friends who made ophthalmic history: Bowman, Donders and von Graefe. *Am J Ophthalmol*. 1926;9(7):524-30.
5. Wright Thomson AM. *The history of the Glasgow Eye Infirmary, 1824-1862*. Glasgow: John Smith; 1963.
6. McGeachie J. Wilde, Sir William Robert Wills, 1815-1876. In: *Oxford dictionary of national biography*. Oxford University Press, Oxford <http://oxforddnb.com/view/article/29403>. Accessed 6 May 2019.
7. Somerville-Large LB. Dublin's eye hospitals in the 19th century. *Dub Hist Rec*. 1964;20(1):19-28.
8. Wilson TG. *Victorian doctor. Being the life of Sir William Wilde*. New York: LB Fischer publishing corp.; 1946.
9. White TdeV. *The parents of Oscar Wilde. Sir William and Lady Wilde*. London: Hodder and Stoughton; 1967.
10. St. Mark's Ophthalmic Hospital, Dublin (Formerly the Park-Street School of Medicine). *Lancet*. 1852;60(1518):312.
11. Story JB. Sir William Robert Wills Wilde (1815-1876). *Br J Ophthalmol*. 1918;2(2): 65-71.
12. Lyons JB. Sir William Wilde's Medico-Legal Observations. *Med Hist*. 1997;41(4):437-54.
13. Defalque RJ, Wright AJ. Travers Vs. Wilde and other: Chloroform Acquitted. *Bull Anesth Hist*. 2005;23(4):3-7.
14. Henkes H, Zrenner C, Albert DM. *History of Ophthalmology 5: Sub Auspiciis Academiae Ophthalmologicae Internationalis*. Dordrecht: Springer; 1993.
15. Ullman EV. Albrecht von Graefe: the man in his time. *Am J Ophthalmol*. 1954;38(4):525-43.
16. *Eight report of St Mark's Ophthalmic Hospital and Dispensary for diseases of the Eye and Ear 1853-54*. Dublin: Alex, Thom and sons; 1854.
17. Editorial. In memoriam. Henry Wilson. *Dubl J Med Sci* 1877;64(1):98-100.
18. Remky H. Albrecht von Graefe. Facets of his work. On the occasion of the 125th anniversary of his death (20 July 1870). *Graefes Arch Clin Exp Ophthalmol* 1995;233(9):537-48.
19. Herde J. Der internationale Charakter der DOG aus historischer Sicht. In: *Deutsche Ophthalmologische Gesellschaft (ed.). Visus und vision-150 Jahre DOG*. Köln: Bierman Verlag GmbH; 2007. p. 275-88.
20. Hirschberg J. *History of ophthalmology. The reform of ophthalmology*. Vol. 11. Part 1a. Blodi FC, trans. Bonn: Wayenborgh Verlag; 1992.