HISTORY IN GASTROENTEROLOGY

Georges-Paul Dieulafoy (1839-1911) and the first description of “exulceratio simplex”

Marianna Karamanou a, Aliki Fiska b, Thespis Demetriou b, George Androutsos a

a Medical School, University of Athens, Greece, b Medical School, Democritus University of Thrace, Greece

Abstract

Professor Georges Dieulafoy is considered to be an outstanding clinician who played a leading role in medicine during the 19th century. He invented the well-known Dieulafoy aspirator, he described a triad for the diagnosis of acute appendicitis and he tried to bridge the gap between internal medicine and surgery. This article presents in details the first description of “exulceratio simplex” that bears his name.

Keywords Georges Dieulafoy, eminent clinician, exulceratio simplex

Ann Gastroenterol 2011; 24 (3): 188-191

Introduction

Dieulafoy’s lesion, typically located within 6cm of the gastroesophageal junction on the lesser curvature, is an uncommon cause of recurrent, often massive gastrointestinal bleeding. The pathogenesis is believed to be the abnormal presence of large-caliber arteries in the submucosa that subsequently cause thinning of the overlying mucosa which then leads to erosion and exposure of the vessel wall to the lumen and eventual intraluminal hemorrhage [1].

The lesion was described clinically, pathologically, pathophysiologically, and therapeutically in a small series, in 1898 by the French physician Georges Dieulafoy who named it “exulceratio simplex” believing that it was the first stage of a gastric ulcer, the progression of which was interrupted by the occurrence of bleeding [2].

Dieulafoy’s life and career

Georges Dieulafoy (Fig. 1) was born in Toulouse, on November 18, 1839, where he commenced his medical studies. In 1863, during the third year in Toulouse’s medical school, he went to Paris, to Hôtel-Dieu hospital to attend the clinical department of Professor Armand Trousseau (1801-1867) [3]. Dieulafoy became the spiritual son of Trousseau and their friendship ended with the untimely death of the latter (Fig. 2). The two years that he spent in the surgical department determined his medical-surgical thought on diseases at a time when physicians...
Georges-Paul Dieulafoy (1839-1911) 189

and surgeons were very distant from each other. During the Franco-Prussian War in 1870, he led an ambulance service at the Holy Trinity church of Paris [4]. In 1872 he married his cousin Claire Bessaignet. They remained childless.

He became chief of the medical department at Tenon hospital in 1879, at St. Antoine in 1881 and at Necker in 1886. In 1887 he was appointed Professor of Internal Pathology in the place of Professor Alfred Hardy (1811-1893) and in 1896 he succeeded Germain Sée (1818-1896) as Professor of Clinical Medicine at the famous Hôtel-Dieu, where he remained until his retirement in 1910 (Fig. 3) [5]. Afterwards, he became chief physician at “Léon Bourgeois” dispensary until his death. He was elected member of the French Academy of Medicine in 1890 and president in 1910 [6].

Dieulafoy was a distinguished practitioner, an alert and intelligent physician and an excellent speaker. His fame was such that each Saturday, the Trousseau Amphitheater at Hôtel-Dieu was completely filled long before the beginning of his histology lectures. His audience: medical students, metropolitan physicians, men of letters, society ladies. Dieulafoy presented his subject with an art which bewitched, he spoke with animation, warmth and enthusiasm by showing off a pleasing literary style [7].

He died on August 16, 1911 after postoperative complications and was buried in Montmartre cemetery [2].

His scientific work

Dieulafoy brought much more to medicine than only the description of a lesion. In 1869, he defended his thesis entitled *La mort subite dans la fièvre typhoïde* (Sudden death in typhoid fever) [8]. During this period he developed an ingenious system of aspiration that took his name (Dieulafoy’s aspirator). Under the title of “Pneumatic Aspiration, a medico-chirurgical method of diagnosis and treatment,” Dieulafoy presented fifty cases of hydatrrosis and some cases of pleurisy successfully treated by his method [9]. It is impressive that his vacuum was manufactured until 1940.

In 1872, he presented his work *De la contagion* [10] and in 1875 his second thesis entitled *Les progrès réalisés par la physiologie expérimentale dans la connaissance des maladies du système nerveux*, (The progress of experimental physiology in understanding the diseases of nervous system) [11]. In 1880 he published his landmark work *Manual of Internal Pathology*, published in sixteen editions between 1880 and 1911 [12].

Dieulafoy has been recognized as an innovative investigator
Dieulafoy’s clinical expression “exulceratio simplex” has not changed since its first description in 1898. However, the therapeutic approach based on diagnostic and therapeutic endoscopy has completely changed the prognosis.

Today we know that “exulceratio simplex” has been reported in sites throughout the gastrointestinal tract, such as the esophagus, duodenum, colon and in rare cases it has an extra-gastrointestinal location such as the bronchi [1, 18].

Georges Dieulafoy was much more than a good physician. He was a medical giant, an outstanding clinician with great experience in pathology and an interest in the etiology of disease.
References

1. Lee YT, Walmsley RS, Leong RWL, Sung JJY. Dieulafoy's lesion. *Gastrointest Endosc* 2003;58:236-243.
2. Dupont M. Dieulafoy G. In: Dictionnaire historique des médecins dans et hors de la médecine. Larousse-Bordas, Paris, 1999, p. 194.
3. Colin A. Dieulafoy G. In Dictionnaire des noms illustres en médecine. Prodim, Bruxelles, 1994, pp. 55-56.
4. Apert E, Dieulafoy G. Les biographies médicales. Librairie J-B Baillière, Paris. 1938, pp. 7-8.
5. Pelin P. La vie et l’œuvre du professeur Georges Dieulafoy. Thèse pour le doctorat en médecine. Faculté de Médecine Paris-Sud. 1981.
6. Huguet F. Les professeurs de la faculté de médecine de Paris. Editions du CNRS, Paris, 1991, pp. 158-159.
7. Peumery JJ. Dieulafoy G. (1839-1911) et l'éducation de la médecine à Paris à la charnière du Second Empire et de la 3e République. *Vesalius* 2004;10:74-77.
8. Dieulafoy G. La mort subite dans la fièvre typhoïde. Thèse de doctorat. Masson, Paris, 1869, p. 63.
9. Dieulafoy G. Traité de l'aspiration des liquides morbides, méthode médico-chirurgicale de diagnostic et de traitement. Masson, Paris, 1873, p. 483.
10. Dieulafoy G. De la contagion. Thèse d'agrégation, Masson, Paris, 1872.
11. Dieulafoy G. Des progrès réalisés par la physiologie expérimentale dans la connaissance des maladies du système nerveux. Thèse d'agrégation, Delahaye, Paris, 1875, p. 187.
12. Dieulafoy G. Manuel de pathologie interne. Masson, Paris, 14e ed., 4 vol, 1904.
13. Dieulafoy G. La tuberculose expérimentale chez le singe (1883).
14. Gallard MT. Anémrysmes miliaires de l'estomac, donnant lieu à des hémorrhagies mortelles. *Bull Soc Med Hop Paris* 1894;1:84-91.
15. Dieulafoy G. Exulceratio simplex. L'intervention chirurgicale dans les hémorragies foudroyantes consécutives à l'exulcération simple de l'estomac. *Bull Acad Med* 1898;39:49-84.
16. Letulle M. Bulletins et mémoires de la Société médicale des hôpitaux, 1888. Séance du 10 août.
17. Cadiot G. L'exulceratio simplex de Dieulafois. De Barret à Zollinger-Ellison. Quelques cas historiques en gastroentérologie. Springer-Verlag, Paris, 2008, pp. 55-64.
18. Bhatia P, Hendy MS, Li-Kam-Wa E, Bowyer PK. Recurrent embolotherapy in Dieulafoy's disease of the bronchus. *Can Respir J* 2003;10:331-333.