

OF GRAVE IMPORTANCE / A GRAVE DETECTION

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For most medical students, the name Graves conjures pathology of autoimmune hyperthyroidism, eponymously known as Graves' disease. Many may not know, however, that Robert James Graves was perhaps one of the most remarkable Irish physicians of his time. Born in Dublin in 1796¹, Graves received his medical degree from Trinity College in 1818, where he graduated first in his class and was awarded the gold medal for scholastic excellence².

During three years of postgraduate training at various medical centers in Europe, Graves was impressed by the method of bedside clinical teaching he experienced: students examined patients, presented histories, and reviewed physical findings with their professor at the bedside of the patient². This teaching method was a stark contrast to Ireland's medical training at the time where medical students could qualify without ever having examined patients¹. When Graves returned to Dublin in 1821 and was appointed chief physician at the Meath Hospital, he reformed the Irish system of medical education and introduced the method of bedside teaching with which we are familiar today².

Graves was an avid clinician and teacher who was appointed professor at the institute of medicine at Trinity College³ and presided over the Royal College of Physicians of Ireland¹. Moreover, Graves was a pioneering doctor for his time in that he placed great emphasis on the importance of medical research. Having published more than 45 journal articles³, Graves believed that every physician should

"learn the duty, as well as taste the pleasure of original work."⁴ In 1832, in line with his passion for research, Graves founded the Dublin Journal of Medical and Chemical science with Sir Robert Kane. The journal persists today as the Irish Journal of Medical Science and is published quarterly by the Royal Academy of Medicine in Ireland⁴.

To commemorate Robert Graves, each spring the Academy and the Health and Research board of Ireland sponsor the Annual Graves Lecture. The aim of the lecture is to support, encourage, and promote research in Ireland. The lecturer who is nominated must prepare a lecture topic encompassing original research that is of clinical interest and, in addition, is awarded the Academy's silver medal and Honorarium. Last year's winner was Professor Colm O'Morain, Consultant Gastroenterologist, at the Adelaide and Meath Hospital incorporating the National Children's Hospital (AMNCH), Dean of Health Sciences and Professor of Medicine at Trinity College Dublin, for his research on the development of a screening programme for the early detection of colorectal cancer in Ireland⁵.

Colorectal cancer is the second most common cause of death from cancer in Ireland following lung cancer, claiming more than 900 lives each year. Furthermore, the incidence of colorectal cancer in Ireland ranks among the highest in Western Europe for both men and women. Since the incidence of colorectal cancer increases with age, the number of cases diagnosed in Ireland is only expected to increase as the population ages⁶.

Currently, more than 50% of patients in Ireland who receive a diagnosis of colorectal cancer are diagnosed with stage 3 or 4: the most advanced stages of colorectal cancer. Fewer than 5% of patients who are diagnosed with stage 4 survive longer than 5 years⁷.

At the moment, a simple screening test for colorectal cancer, which is able to detect occult blood in stool samples exists. Subsequently, organized screening programmes have been implemented, or are in the process of being implemented, in many countries around the world. In the EU, 13 member states have some form of a screening programme in place, although the modality of screening (direct colonoscopy, or guaiac-based faecal occult blood testing followed by colonoscopy) differs between nations⁸.

In 2008, with Professor O'Morain as the lead clinician, the first comprehensive bowel-screening programme in Ireland, which was designed to determine the feasibility of national screening for colorectal cancer, was initiated. The programme used the Faecal Immunochemical Test (FIT), a newer alternative to the guaiac-based faecal occult blood test (g-FOBT), which specifically detects colonic blood loss⁸. 10,000 people in the Tallaght community aged 50-74 were offered bowel screening, of which 5,063 participated. Of these, 514 people had positive FIT tests, 419 went on to have a colonoscopy and 137 were found to have cancer or advanced neoplasia, the majority of which were early stage diseases⁷.

Colorectal cancer is a highly curable disease if detected early and there is now overwhelming evidence to suggest that the use of a faecal occult blood test as a screening tool reduces mortality^{9,10,11}. The results obtained from the Tallaght Hospital-Trinity College Dublin Colorectal Cancer Screening programme provide convincing evidence for the success and feasibility of screening for colorectal cancer within Ireland, and will undoubtedly be invaluable in the future development of a national screening programme.

References

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