Prescription history could help GPs diagnose cancer earlier

May 11 2017

Cancer Research UK-funded scientists are to examine whether identifying patterns in medication given to patients before they develop cancer could improve early diagnosis.

Looking for patterns in prescriptions and other data could help guide GP
referrals, especially in patients with non-specific symptoms that don't obviously indicate cancer.

Only about half of those with the most common cancers have "red-flag" symptoms. And this is even lower in cancers with poor survival rates such as pancreatic, stomach, ovarian and brain cancer.

This research is being led by Health Data Insight, which has received funding through Cancer Research UK's Pioneer Awards scheme. Together with Public Health England and the NHS Business Services Authority they have created an anonymous dataset of nearly all the primary care prescription data – approximately 80 million medications being prescribed each month.

The researchers will then link this information to data in the National Cancer Registration and Analysis Service to look for trends in medications given to patients before they were diagnosed with cancer.

For example, small studies from Denmark have found that many lung cancer patients had a history of being given prescriptions for antibiotics.

The data may also shed light on rarer cancers like brain tumours which are particularly hard to recognise. A GP will see a child with a brain tumour probably only once in their professional lifetime. But they will see around two children a week with symptoms of a brain tumour, such as visual problems, headache, or problems with gait. The work from this study could help identify which patients to refer for an MRI.

Dr Jem Rashbass, medical director at Health Data Insight, said: "We want to develop a tool that helps GPs diagnose cancer earlier in the hope of saving more lives. It can be very difficult for GPs to know which patients to refer for further tests."
"Large studies like this are only possible because anonymous data on large numbers of cancer patients is available for research through the NHS. Our idea is to use this unparalleled information on prescription data and other information to better identify patients for referrals or follow-up."

Dr Iain Foulkes, director of research and innovation at Cancer Research UK, said: "Cancer survival in the UK lags behind other countries in Europe, in part because people are diagnosed later when the disease is more advanced and harder to treat.

"Dr Jem Rashbass is collecting a wealth of data which he can then mine for new ways to diagnose cancer earlier. This is a potentially powerful study that could transform the way cancer is detected and is made possible because of the unique strengths of the UK health system."

Provided by Cancer Research UK


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.