QResearch News Update Spring 2020

QResearch HRT study voted ‘UK paper with the highest number of citations per month’ by BMJ

HRT and VTE risk

This study tested the safety of individual types of HRT: oral and transdermal; estrogen only and combined; different hormone combinations

Findings

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT use overall:</td>
<td>43%</td>
<td>increased</td>
</tr>
<tr>
<td>Oestrogen only:</td>
<td>40%</td>
<td>increased</td>
</tr>
<tr>
<td>Combined:</td>
<td>73%</td>
<td>increased</td>
</tr>
<tr>
<td>Oral preparations:</td>
<td>58%</td>
<td>increased</td>
</tr>
<tr>
<td>Estradiol vs. conjugated oestrogen:</td>
<td>15% lower risk</td>
<td></td>
</tr>
<tr>
<td>Conjugated oestrogen &amp; medroxyprogesterone:</td>
<td>highest 110% increased risk</td>
<td></td>
</tr>
<tr>
<td>Estradiol &amp; dydrogesterone:</td>
<td>lowest 18% increased risk</td>
<td></td>
</tr>
</tbody>
</table>

80,396 women with VTE

880 transdermal

4915 oral use

No increased risk for transdermal preparations

Hormone Replacement Therapy

Venous thromboembolism

Menopause is a natural stage of life at about 45 to 55 years of age. Up to 80% of women have symptoms affecting their quality of life. These include hot flashes, night sweats, mood changes, joint stiffness.

HRT treat these symptoms but increase risk of venous thromboembolism (VTE). It was not clear which types of HRT are the safest.

A QResearch-supported study into the risks of thromboembolism in women taking Hormone Replacement Therapy (HRT) has been named UK research paper with the highest number of cites per month (at the time of sampling) for papers published in The BMJ in 2019 (according to Impact Vizor software) by the British Medical Journal.

The study, headed by Dr Yana Vinogradova, and Professor Carol Coupland of the University of Nottingham, and Professor Julia Hippisley-Cox of the University of Oxford, found that women who take HRT have a higher risk of serious venous thromboembolism (VTE) than those not taking oral HRT.

While the study was observational and cannot establish cause, the researchers from the University of Nottingham said that their findings “provided a more detailed picture of the VTE risks for different HRT preparations and can help clinicians and women make treatment choices.”

Find out more here https://www.bmj.com/content/364/bmj.k4810

Next Issue

We hope you like our new newsletter format. It is a great opportunity for us to bring together a range of news on the use of the QResearch database.

To feature your research news here, please email Claire Meadows at pa-Julia.hippisley-cox@phc.ox.ac.uk
Anticholinergic drugs & the risk of dementia: a nested case control study using QResearch database

A large study which used the QResearch database to examine whether anticholinergic drugs are associated with an increased risk of dementia, led by Professor Carol Coupland from the University of Nottingham, has recently been published in the JAMA Internal Medicine journal.

What were the main findings?

- There was an increased risk of dementia associated with use of anticholinergic drugs after accounting for other risk factors for dementia.
- Results showed that there was a 49% increased risk of dementia for individuals in the highest category of anticholinergic drug use (>1095 total standardised daily doses; equivalent to taking one anticholinergic drug daily at the standard dose for 3 years) in the one to 11 years before diagnosis compared with those who had not taken anticholinergic drugs. There were higher risks in people with dementia diagnosed before the age of 80 years and also in people diagnosed with vascular dementia rather than Alzheimer’s disease.
- The study results showed that there were increased risks of dementia associated with the anticholinergic antidepressants, antipsychotic drugs, antiparkinsons drugs, bladder drugs and epilepsy drugs studied. Other types of anticholinergic drugs, such as antihistamines, and gastrointestinal medications, did not show increased risks of dementia.

Reference

Link to publication: https://cutt.ly/frBcyWZ

QResearch joins Oxford-led consortium for liver cancer early detection

Professor Julia Hippisley-Cox and the QResearch electronic health records database are to contribute to a prestigious Cancer Research UK-funded programme to research the earlier detection of hepatocellular carcinoma. The Early Detection Programme Award, worth £2.5million over five years, brings together a multidisciplinary team from across the University of Oxford to understand more about the changes in the liver as cancer develops. The researchers will use this to inform new, more sensitive diagnostic tests with the ambition of detecting liver cancer earlier.

In this research programme, scientists aim to learn more about the origins of liver cancer and develop more sensitive detection tests. The Oxford-led team will investigate people with and without cancer to identify factors that will enable better risk assessment and earlier cancer detection. Their research will include analysis of molecular profiles in both the liver tissue and the blood, and advanced liver imaging.

Professor Ellie Barnes, Nuffield Department of Medicine and the Chief Investigator for this programme, said “We are delighted to receive funding from CRUK for this research programme. With the support of a world-class team, I believe that this award will allow us to make an important step change in the UK for both HCC detection and the scientific understanding of cancer initiation, with the aim of improving survival of this increasingly prevalent disease.”

Dr Alexis Webb, Cancer Research UK’s Early Detection Senior Research Funding Manager, said “At the moment, liver cancer is often diagnosed too late for treatment to be effective. But by developing better techniques to diagnose the disease earlier, a greater number of patients will have more treatment options available to them and a better chance of survival”.

About QResearch
QResearch is a large consolidated database derived from the anonymised health records of over 35 million patients.

The data currently come from approximately 1500 general practices using the EMIS clinical computer system.

The practices are spread throughout the UK and include data from patients who are currently registered with the practices as well as historical patients who may have died or left.

Historical records extend back to 1989, making it one of the largest and richest general practice databases in the world.

Founder Julia Hippisley-Cox is based at Nuffield Department of Primary Health Sciences, Medicine Sciences Division, University of Oxford.

www.qresearch.org

“We are delighted to be part of this innovative award. We will use QResearch to develop a new computerised risk prediction tool which will help identify patients in primary care who are at highest risk of liver cancer so that patients can be identified at the earliest possible opportunity to help speed up the diagnosis and treatment for people with liver cancer used across the NHS.”

– Professor Julia Hippisley-Cox, Director of QResearch and Professor of Clinical Epidemiology and General Practice
Groundbreaking QResearch funded by the Motor Neurone Disease Association aims to offer hope to patients & families

QResearch director Professor Julia Hippisley-Cox is leading on an exciting new project which aims to give hope to people living with motor neurone disease (MND), their families and those involved in providing care in this area.

Professor Hippisley-Cox’s project at the University of Oxford involves a detailed examination of 20 years’ worth of data from MND patients via QResearch.

She hopes to identify which of the ‘red flag’ symptoms are most commonly presented to GPs and identify trends.

Professor Hippisley-Cox says “This exciting research potentially holds the key to faster diagnosis for people with suspected MND”.

It is the hope of the MNDA that the findings of the study be integrated into NHS systems so alerts are triggered if MND is a possibility.

www.mndassociation.org

New era for QResearch as director Professor Julia Hippisley-Cox appointed to University of Oxford

We’re delighted to announce the appointment of Professor Julia Hippisley-Cox, who founded QResearch with EMIS, as Professor of General Practice at the University of Oxford’s Nuffield Department of Primary Care Health Sciences.

The QResearch Database is relocating from Nottingham to Oxford University. This is with the support of both Nottingham and Oxford Universities, EMIS, the QResearch Advisory Board (which includes practice and patient representation), NHS Digital, Public Health England, the RCGP, the BMA and the EMIS National User Group.

QResearch will continue to be used solely for research purposes to generate new knowledge such as the natural history of disease, risks and benefits of medicines, health inequalities and tools such as QCancer, QFracture and QRISK to improve patient care.

It will continue to be hosted with the very highest levels of security and governance under the leadership of Professor Julia Hippisley-Cox in Oxford. All research continues to be subject to scientific review and published for public benefit. The QResearch database will be hosted in the Oxford Data Centre. Oxford University is the sole point of access for researchers wishing to undertake research using the database.

https://www.phc.ox.ac.uk/

Please see https://cutt.ly/CrBcOFV for information on individual research projects.

QResearch to Feature in the Pancreatic Cancer UK Early Diagnosis research alliance

The Pancreatic Cancer UK Early Diagnosis Research Alliance supports dozens of the brightest research minds from institutions across the UK, meaningfully drive down the time to diagnosis for people with pancreatic cancer. They will do this through the close collaboration between four key specialists areas in the delivery of early diagnosis.

GPs need better assessment tools to quantify a patient’s risk of different types of cancer so that the right patients are sent for the right investigations making efficient use of scarce resources. QResearch data will be used to identify and quantify ‘red flag’ symptoms associated with different types of pancreatic cancers. The research will inform the evidence base for the refinement of the QCancer tools which have been integrated into GP systems in order to improve the early recognition of these tumours.

By sharing information and knowledge and coordinating efforts, the different work areas will be enhanced by one another and at the same time minimise duplication and waste. Alliance has been made possible through the generous support of charity Nicki’s Smile and founder Dan Blake, together with funds generated by other supporters. Leading the large team of researchers that form the Alliance is Professor Steve Pereira, University College London, who has over 20 years of experience in working as a pancreatic cancer researcher.

To find out more visit https://cutt.ly/grBcVV4

Advisory Board member focus: Dr Mike Walton

Dr Mike Walton is the Chair of the QResearch Advisory Board. The board represents the key stakeholders in QResearch in order to gain and retain the respect of the public, the NHS, practices and the research community.

Mike is a Trustee of the EMIS National User Group and GP Partner in St Albans, Hertfordshire. Mike is Joint Clinical Director HLH Primary Care Network, St Albans.

He also works regularly as an attending GP in his local NHS Mental Health Trust providing GP services to long-stay inpatient units.

In addition to his membership of the QResearch board, Mike is a member of the EMIS NUG Committee, and Joint BMA RCGP GP IT Committee, Chair of St Albans and Region EMIS Local User Group (STARLUG).