UNDERSTANDING GP ATTITUDES TO CANCER PREVENTING DRUGS

FEBRUARY 2017

CANCER RESEARCH UK

EXECUTIVE SUMMARY

Around four in 10 cases of cancer could be prevented in the UK, largely through lifestyle changes. In addition, chemoprevention – the use of cancer-preventing drugs – has the potential to save many lives by stopping cancer developing in the first place.[i]

Chemoprevention is a relatively new approach to cancer prevention and we know that there is considerable variability in the uptake of different medicines. In response, the Cancer Strategy for England recommends a more systematic approach to making chemoprevention available.[ii]

Ensuring evidence-based chemoprevention is routinely discussed with and offered to the relevant people should be a priority across the UK. For example, an estimated quarter of a million women in the UK are at increased risk of breast cancer and are eligible for preventive medications.[1] And research demonstrates that chemoprevention using Selective Oestrogen-Receptor Modulators (SERMs) such as tamoxifen and raloxifene can reduce incidence of breast cancer by around a third or more among women with a clear family history of the disease.[iii]

However, it is not currently possible to understand on a national level what the level of uptake of chemoprevention currently is. Or indeed how many cases of cancer could be prevented should uptake increase. Published studies suggest there may be problems with making chemoprevention part of routine clinical practice.[iv]

Ensuring evidence-based chemoprevention is routinely discussed with and offered to the relevant people should be a priority across the UK

Our study aimed to increase our understanding of GP attitudes towards offering the use of tamoxifen and aspirin to lower the risk of cancer, or to prevent cancer.[2] This is important because it's an area where there is little research around clinician attitudes and knowledge.

We focussed on the prevention of breast and bowel cancer via the use of tamoxifen and aspirin for two reasons.

Firstly, because of the high level of evidence demonstrating the efficacy of both these drugs. Among patients taking tamoxifen for five years, the preventive effects are expected to last at least 20 years.[v] Evidence from randomised controlled trials have shown the benefits of aspirin in preventing bowel cancer in population risk[3] participants and in reducing the incidence of bowel cancer for people with Lynch Syndrome. [4]

[1] Figures calculated in reference to the PROCAS study (www.ncbi.nlm.nih.gov/pubmed/25047362) that found approximately 10-12% of women met NICE thresholds and assuming two million women per annum are screened.

[2] This study in this instance did not explore clinician attitudes towards the use of chemoprevention in preventing secondary cancer. This would be a valuable area for follow up research.

[3] Population risk' for an individual refers to their risk of disease assuming they are not at high risk, for example they don't have a genetic or familial predisposition.

[4] Lynch Syndrome is also known as hereditary non-polyposis colorectal cancer (HNPCC) and is

Secondly, we intentionally chose one drug that is covered by National Institute for Health and Care Excellence (NICE) and Healthcare Improvement Scotland (HIS) guidance (tamoxifen) and, as a comparator, one drug that is not (aspirin), despite the weight of evidence for its efficacy.

In 2013 NICE recommended the use of tamoxifen and raloxifene for women at an increased risk of breast cancer due to their family history (NICE Guideline CG164). Wales and Northern Ireland follow NICE guidelines.

However, there are not yet formal guidelines for prescribing aspirin in the UK and there is no process established to ensure consistency in prescribing tamoxifen in England, Wales or Northern Ireland. [11]

Local policies in England are in place. For example, the Greater Manchester Medicines Management Group have established a shared care protocol whereby GPs prescribe tamoxifen and raloxifene, but this is after it is prescribed by a secondary care clinician first (via the family history clinic).

In Scotland, there is an established pathway for GPs to prescribe tamoxifen in a shared care agreement for high risk women between primary and secondary care.

The Cancer Strategy for England includes two recommendations (6 and 7) which set out the need to improve appropriate prescribing of chemopreventive agents, as well as the need to update NICE guidelines on the use of aspirin for individuals with hereditary non-polyposis colorectal cancer (HNPCC) or Lynch Syndrome.

THE STUDY

Cancer Research UK commissioned a consortia of academic researchers led by the Wolfson Institute of Preventive Medicine, Queen Mary University of London, to carry out the study.

A sample of 1,007 GPs from across the UK completed an online survey in May 2016 investigating GPs':

- Awareness of familial breast cancer guidelines and confidence in prescribing tamoxifen for women with a strong family history of breast cancer. Respondents were asked to consider a number of scenarios describing a patient.[5]
- Awareness of Lynch Syndrome and the preventive effects of aspirin among those with Lynch Syndrome and their comfort in discussing the risks and benefits of the drug.
- Attitudes towards recommending the use of aspirin for individuals at population risk of bowel cancer.

In this instance, the term chemoprevention was used to refer to the use of medicines to prevent disease among people not previously affected.

KEY FINDINGS: TAMOXIFEN

AWARENESS

Strikingly for a drug that is covered by guidance, there was low awareness of the potential of tamoxifen.

Nearly half of the responding GPs (48%) were unaware tamoxifen could be used for the prevention of breast cancer among women

estimated as affecting between 1 in 400 and 1 in 1,200 people in the UK. Figures will not be exact as people aren't routinely tested. The CaPP2 trial has shown the long term use of daily aspirin (600mg) by people with Lunch Syndrome can reduce the incidence of bowel cancer and other cancers associated with the syndrome.

[5] This included difference in lifetime risk of developing breast cancer and if the GP was responsible for writing the first prescription to the patient, or if this originated from a family history clinician.

with a clear family history of the disease.

Only 24% were aware of the NICE familial breast cancer guidelines. A similar level of awareness (20%) for the HIS guidelines was reported among Scottish GPs.

WILLINGNESS TO PRESCRIBE

Despite low levels of awareness, GPs were willing to prescribe tamoxifen. 77% reported they would be willing to prescribe tamoxifen for a patient at increased risk of breast cancer.[6]

In fact, the GPs that were aware of the NICE or HIS guideline relating to tamoxifen were more willing to prescribe tamoxifen. Plus willingness to prescribe was higher among GPs who were told they would be continuing a prescription initiated by a secondary care clinician (in this instance by a family history clinician).

COMFORT

A third of GPs said they would be quite uncomfortable (30%) or very uncomfortable (4%) managing a patient who decides to take tamoxifen.

GPs were asked about their level of comfort in discussing the risks and benefits of tamoxifen with patients.

As above, respondents were more likely to report they were comfortable if they were told a secondary care clinician would write the first prescription. And the GPs aware of the NICE or HIS guideline also reported greater comfort in discussing the risks and benefits of the drug.

INFLUENCES ON DECISION MAKING

A particular issue in chemoprevention is that these drugs will generally be old ones that have been investigated for new uses so will likely have come off-patent. As such, prescribing will often be 'off-label'. Our survey shows that off-label prescribing is a factor in the decision-making of GPs – but several other factors had a greater influence.

The factors GPs reported as most likely to affect their decision to decision to prescribe tamoxifen were the evidence for the benefits of the drug; existence of the NICE or HIS guideline; and the patient's awareness of the risks and benefits.

On the flipside, the financial costs; the prescribing budget in their practice; and attitudes of more senior colleagues, were reported as least likely to affect their decision.

SUPPORT REQUIRED

GPs wanted support in prescribing tamoxifen.

63% wanted to speak with someone else before they decided to write a prescription. It was most common to want to speak with a specialist in secondary care (68%), a colleague in primary care (26%) or the local CCG or medicines management team (22%).

COMMISSIONER ATTITUDES

The survey also included 192 English GPs with a role in commissioning. Only ten reported that their Clinical Commissioning Group (CCG) had discussed tamoxifen and only a third believed CCGs were responsible for making local policy decisions about the drug.

In fact, over half (56%) believed it was actually the responsibility of the local medicines management group and 42% believed their CCG would have concerns about GPs prescribing tamoxifen.

KEY FINDINGS: ASPIRIN

AWARENESS

In contrast to the low levels of awareness of the potential of tamoxifen, the majority of GPs (73%) were aware that aspirin could

[6] The remaining GPs said they were "probably not willing" (18%) or "not at all willing" (5%) to prescribe tamoxifen.

reduce the risk of bowel cancer in population risk individuals. This is despite the fact that there is no clinical guideline relating to aspirin.

Furthermore, around one quarter had previously discussed the use of aspirin for cancer prevention with a patient at population risk.

The study did not ask GPs why they were aware of the preventative effects of aspirin. The higher level of knowledge in this instance could be due to widespread media coverage of the benefits together with the fact that aspirin is an older drug.

A third of the GPs had not heard of Lynch Syndrome or any of its associated names. Among those GPs who had heard of it, nearly half (47%) were aware of the preventive effects of aspirin for those with the syndrome.

COMFORT

Most GPs (64%) reported they would feel comfortable discussing the benefits and risks of aspirin with a patient at population risk who wanted to take it to prevent bowel cancer.

After reading information supplied by our survey describing the preventive effects of aspirin among people with Lynch Syndrome, 68% of the GPs surveyed indicated that they would be comfortable discussing the risks and benefits of aspirin with a patient with the syndrome.

WILLINGNESS TO PRESCRIBE

A part-funded Cancer Research UK randomised controlled trial (the CaPP2 trial) showed a significant reduction in bowel cancer among those with Lynch Syndrome who took 600mg per day of aspirin for at least two years.[vi] However 600mg is the dose that GPs participating in this study reported as being least willing to prescribe, compared to lower doses of aspirin.[7]

Those who were aware of the preventive effects of aspirin for people with Lynch Syndrome were more willing to prescribe at 600mg.

RECOMMENDATIONS

Our study shows that more needs to be done to promote evidence and guidance on chemoprevention. This is particularly important in regard to existing familial breast cancer guidelines in order to increase GP awareness and their confidence in prescribing tamoxifen.

We also need a better understanding of the way in which the interaction between primary and secondary care can be improved to facilitate the use and uptake of chemoprevention. And patients, when considering the use of tamoxifen or aspirin, need high quality information in order to make informed decisions.

Finally, providing GPs with more information about chemoprevention is key to ensure they are better prepared for these conversations and enabled to take appropriate action.

1. THE PREVENTIVE EFFECTS OF TAMOXIFEN AND ASPIRIN, AND TAMOXIFEN'S ASSOCIATED NATIONAL GUIDELINE, REQUIRE BETTER PROMOTION

- NICE and NHS England (and national equivalents) should develop a programme of work to increase GP awareness of the guidelines relating to tamoxifen together with awareness of the benefits and risks of chemoprevention using tamoxifen.

- NHS England (and national equivalents) should commission NICE to develop

[7] 62% of respondents were willing to prescribe 600mg. Most were willing to prescribe at the lowest dose, 100mg (91%).

guidelines for the use of drugs for the prevention of bowel cancer, in line with the recommendation of the Cancer Strategy for England.[vii] This should consider the use of aspirin for individuals with Lynch Syndrome. Once published, Clinical Commissioning Groups should ensure that GPs appropriately implement them.

- A decision-aid that can be used by both patients and clinicians when discussing the decision to use medication for the primary prevention of cancer should be developed. Local decision-aids are currently in use. NHS England (and national equivalents) should assess these. The Cancer Alliance leads should then ensure these resources are made available for their local populations – ensuring proper information is provided for patients on which to base their decision.

- For the appropriate patient groups, primary prevention should be listed as an unlicensed indication for tamoxifen and aspirin in the British National Formulary (BNF). The BNF does not have the authority to licence a medication but it frequently describes alternative unlicensed indications for medications.

2. GPS REQUIRE MORE SUPPORT AND INTERACTION WITH THEIR SECONDARY CARE COLLEAGUES

The Cancer Alliances should work with research scientists, clinical networks and NICE to develop standardised pro-formas for secondary care clinicians, such as those from the breast cancer department, family history or clinical genetics clinic, to send to GPs when they are referring high-risk patients to discuss chemoprevention. These could be adapted from existing templates within the HIS guidelines for tamoxifen.[viii]

3. SHARED CARE AGREEMENTS BETWEEN PRIMARY AND SECONDARY CARE COULD FACILITATE PRESCRIBING

To facilitate greater use of chemoprevention, prescriptions could be initiated in secondary care and continued in primary care. Areas of work should include:

- NHS England, NHS Wales and the Department of Health in Northern Ireland should seek to replicate the national prescribing policy developed within the HIS guidelines for tamoxifen, adapting this policy for use within their respective nations.

- The approach used by the Greater Manchester Medicines Management Group for tamoxifen and raloxifene[8] prescribing should be explored to understand if this could be considered as a model for the rest of England. The Cancer Alliances are a route for this to happen.

- In England, local medicines management groups and CCGs, alongside family history clinics and genetics centres, should prioritise shared care agreements for the prescription of tamoxifen and raloxifene. The Cancer Alliances could facilitate these discussions.

- Further research is required to investigate how local prescribing policies are formed in Wales and Northern Ireland. The role of cancer networks in local policy development should be explored.

[8] While both tamoxifen and raloxifene are available as chemoprevention agents to women at increased risk of breast cancer, evidence available suggests the majority of discussions with patients are about tamoxifen. We therefore decided to base our study around the use of this drug.

4. IMPROVE DATA COLLECTION RELATING TO CHEMOPREVENTION

- NHS England (and national equivalents), working with relevant partners, should lead in ensuring national level data on the numbers of people who are eligible for preventive medicines is collected, together with information on the subsequent level of uptake.

AREAS FOR FUTURE FOCUS

Our short study specifically explored the perceptions and attitudes of GPs towards chemoprevention. It did not collect information on the perspectives of patients, an area of equally important focus – particularly if we are to understand more about why people may choose to take (or not to take) preventive medicines.

This study also only focussed on chemoprevention for those that have not been previously affected by cancer. Further research in terms of the role of preventive medicines in preventing secondary cancer is needed.

To move forward, more work is required to understand what support mechanisms would boost GP confidence in making proper use of chemoprevention. Plus, greater exploration of the implications that many cancer preventing drugs will have come off-patent – but will have been proven effective in new uses for which they haven't been licensed.

cruk.org/chemoprevention
For more information, or for a copy of the full report, please contact
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Publication date: February 2017
Registered Charity in England and Wales (1089464),
Scotland (SC041666) and the Isle of Man (1103)

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