Registrars' Realm

Differentiating undifferentiated dyspepsia

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'Based in the Hutt Valley in Wellington, my GPEP1 year has been interesting in so many ways. Life as a GP is full of wonderful challenges and infinite possibilities.'

Domperidone as the first drug of choice in the management of dyspepsia in general practice.

Background

Dyspepsia is a common presenting complaint in general practice. Five per cent of a sample of Wellington adults stated that they had seen their GP at some point about heartburn or dyspspsia,[1] and the WaiMedCa study identified 6.4% of GP consults dealing with digestive problems (upper and lower GI symptoms).[2] Dyspepsia can occur with or without heartburn.

A commonly prescribed drug for the management of both dyspepsia and heartburn/GORD (gastroesophageal reflux disease) is omeprazole. Pharmac feel that omeprazole is overprescribed and are actively campaigning to ensure that dyspepsia/heartburn is managed cost effectively.[3]

National Guidelines are available outlining the evaluation and management of dyspepsia and heartburn.[1] The algorithms within the guidelines help to identify patients who should be referred for gastroscopy immediately, or who could be trialled with empiric therapy.

Empiric therapy for the management of undifferentiated dyspepsia as outlined in the national guidelines includes advice on lifestyle modification, the use of antacids, and a stepwise introduction of medications beginning with Domperidone, then progressing to H2RAs (type 2 histamine receptor antagonists) then finally PPIs (proton pump inhibitors).

I had not previously encountered Domperidone as a recommended first line medication for dyspepsia/indigestion and wondered how commonly it was being used for this in the practice I was working in.

I also found the guidelines for the evaluation and management of dyspepsia/heartburn to be quite long and involved and wondered how closely they were followed and applied in practice.

Methods

I created a query of our practice database (Medtech) and included all registered patients coded between Sunday May 28th 2006 and Wednesday May 28th 2008.

I used the search terms: within other specific stomach function disorders – which bought up the codes 'dyspepsia' and 'indigestion NOS'; 'indigestion symptoms'; 'heartburn'.

I created a data collection sheet based on the algorithms for the initial evaluation of dyspepsia/heartburn, the management of undifferentiated dyspepsia, and the management of GORD.

I reviewed the notes of all the patients identified by the search terms and recorded data that detailed how closely the algorithms were being followed.

Results

Over the two year period from Sunday, May 28th 2006 to Wednesday, May 28th 2008, 38 people were coded with symptoms of dyspepsia or indigestion and three people were coded with heartburn.

Initial evaluation (algorithm 1)

Alarm signals

- 17/41 (41%) had a reasonable number of significant red flag negatives documented or had documented something to the effect of 'no red flags'
- 19/41 (46%) had a clearly identified alarm signal documented
- In two cases it was unclear and one person had a long-term classification of dyspepsia after a diagnosis at a previous practice.

Age at first presentation

- 21/41 were over 50, in 2/41 this was the only identified alarm signal that should indicate referral for gastroscopy.

Heartburn (with/without dyspepsia)

- 18/41 (44%) had definitely identified heartburn
- 7/41 (17%) had possible heartburn
- 1/41 (2%) had occasional heartburn.

NSAID use (without heartburn)

- 2/41 (4%) n.b. 4/18 with heartburn were using NSAIDs.

Management of undifferentiated dyspepsia (algorithm 2)

(20/41 people primarily applied to this algorithm)

High H. pylori prevalence (> 30%)

- This led me to investigate the local prevalence of H. pylori. This was already being done by the clinical pharmacist of our practice

as part of her audit of omeprazole use and, between us, the best we could come up with was an expert comment from a local gastroenterologist who estimated local prevalence at about 10% for the general population and up to 50% in the Maori/Polynesian population. This was consistent with the Guidelines which described information on prevalence rates in New Zealand as 'patchy'.

'Test for H.pylori, and treat if positive'

- 6/41 (15%) were tested, some of these people had heartburn (not part of the GORD algorithm). One person with previous H.pylori was treated again empirically.

Empiric therapy

- Lifestyle factors: 3/20 (15%) had documented evidence of lifestyle advice given
- Antacids: 2/20 (10%) had documented recommendation to use antacids
- Domperidone: prescribed by a GP for one person, metoclopramide prescribed for one person and for another three people (one with GORD) domperidone was prescribed by a specialist gastroenterologist
- Ranitidine: 5/20 (25%)
- Omeprazole: 14/20 (70%). 10/20 (50%) of people receiving omeprazole had no other drug treatment.

Monitor for response

- 16/20 (80%) had documented evidence of follow-up and review, 2/20 had seemed to settle as no ongoing symptoms were documented and no more scripts were given.

One person had a long-term diagnosis of dyspepsia on ranitidine and one was newly referred to a surgeon. One person was identified who had been followed up and had seemed to settle but was getting ongoing omeprazole scripts. Due to risk factors and it not settling, their regular GP was informed and gastroscopy considered.

Management of GORD (algorithm 3)

(22/41 applied to this algorithm including one person who, after initial empiric dyspepsia therapy, had a gastroscopy that showed GORD)

Empiric therapy

- Lifestyle factors 5/22 (23%) had clearly documented evidence of lifestyle advice given
- Medication with review and step-down; four to 12 weeks at each step
  - PPI full dose – 21/22 (95%) had full dose PPI treatment, the one that didn't had previous barretts oesophagus and was on high dose PPI
  - PPI ½ dose – tried in 2/22 people but recurred in both and so increased again
  - H2RA – 3/22 had tried ranitidine but had returned to PPI
  - Antacid – advice on antacids was included in 3/22 people's plans
  - PRN – one by GP, one by specialist and one of high dose PPI by specialist
- Response – Clearly documented evidence of monitoring for response was found in 10/22 (45%). Of these three responded and had treatment reduced. In seven others there was documented recurrence. 5/22 had follow-up and advice from a specialist. 5/22 appeared to settle as symptoms were not mentioned again and there were no ongoing scripts for PPI.

Referral for gastroscopy

Of the 41 people identified in the audit, 15/41 (37%) had an immediate referral for gastroscopy, 3/41 (7%) had a delayed referral (after trial of therapy) and 23/41 (56%) did not have gastroscopy.

19/41 people had alarm signals that should have indicated referral for gastroscopy.

14/19 (73%) of these people did have gastroscopy. For three of the five who didn't there was enough clinical indication that their own GP was contacted and advised of this and gastroscopy recommended. One of the five patients had atypical symptoms that settled when his hiccups stopped, and another had had gastroscopy discussed but had not returned.

One further person had only age >50 as an indication, and her symptoms had settled with a brief trial of therapy so gastroscopy was not pursued.

Discussion

Dyspepsia, indigestion and heartburn are very underutilised Read codes in our practice. With a registered practice population of 18 000 one could expect close to 1000 presentations per year with these symptoms. It could be that GORD and oesophageal reflux are more commonly used Read codes for these symptoms and a brief query looking at these revealed that this is probably the case. Recognising and coding for dyspepsia and or heartburn could be a good way of remembering the algorithms and differences between the empirical treatments of undifferentiated dyspepsia and GORD.

Patients with alarm signals were very likely to be referred appropriately for gastroscopy, as were patients not responding to empiric therapy. The couple whom I identified and discussed with their GPs as needing gastroscopy had multiple medical problems and had had more pressing issues at each of the presentations since their symptoms had been identified.

Initial empiric therapy for GORD generally followed the GORD algorithm from the guidelines. Follow-up for response was generally well done, either by the GP or through a person being referred on to a specialist. There was evidence that GPs do try to step down treatment, and in some cases resolution of symptoms was evident by a lack of ongoing prescriptions for treatment.

Initial empiric therapy for dyspepsia, however, tended to follow the GORD algorithm more often than the Dyspepsia algorithm. Omeprazole still tended to be the drug of choice and in half the patients it was the only drug tried. Domperidone only featured when recommended by a specialist and had been prescribed by myself

once only after reading the guidelines in preparation for this audit. One GP had used metoclopramide with one patient. As with GORD, there tended to be good follow-up and review.

Limitations

Documentation

It was easy to identify when one clearly identified alarm signal had either been documented or existed (e.g. age). It was more difficult to establish in a lot of cases that there were no alarm signals and this often had to be inferred from the lack of them being documented.

There was also very poor documentation of what lifestyle advice had been given or that any had been given, and poor documentation of advice to take over-the-counter antacids where appropriate.

This probably relates to time pressures and what GPs choose to document.

Take home messages and outcome of this audit

Doperidone is underutilised in the management of undifferentiated dyspepsia in the patients that I reviewed. The New Zealand Guidelines for the management of dyspepsia and heartburn are good and do make sense and the principles within them are generally applied well by GPs in our practice, but the finer points of the algorithms do take a bit of getting your head around.

Plan

1. Present my findings to my colleagues.

a. Increase awareness of the guidelines and options for management – particularly of undifferentiated dyspepsia.

b. Emphasise the importance of documentation at the initial presentation both for audit purposes and to set a defined beginning point to refer back to for ongoing review.

c. Discuss the value of a screening tool or consultation template for use when someone presents with symptoms of dyspepsia or heartburn and instituting that if people feel it would be helpful.

d. Raise awareness of the available patient handouts and resources on the non-drug and lifestyle management of dyspepsia and heartburn (e.g. handouts available on the 'Gutreaction' website).

e. Reinforce the importance of regularly reviewing symptoms, alarm signals and ongoing management of anyone on medication – particularly omeprazole for dyspepsia or heartburn.

2. Modify and improve my own practice.

a. Use the coding of dyspepsia or heartburn as a trigger to apply the guidelines in both the assessment and management of these presenting problems.

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The pressure to act: Is hypertension controlled adequately in a general practice setting?

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'I've relished my first year in general practice; learning through GPEP1 and practising concurrently is a real privilege...and being able to do this in sunny Blenheim is perfect! I'll have to stay!'

Introduction

Hypertension is an independent risk factor for cardiovascular disease. The relationship between increasing blood pressure and the rate of cardiovascular disease is continuous, with no threshold.[1] Importantly, the reduction of high blood pressure significantly reduces mortality related to cardiovascular disease.[1-4]

Guidelines for the management of hypertension are very specific. For all patients – even patients with low cardiovascular risk – the blood pressure should be less than 140/90 (or 130/80 for those with diabetes or renal insufficiency).[3,4] However, in reality this target is difficult to achieve. Numerous studies have shown that up to 75% of patients with hypertension do not have adequate blood pressure control.[3]

General practice should be an ideal setting to manage hypertension, given our opportunities for screening and our ability to provide continuity of care. The aim of this audit was to evaluate whether people in our practice on antihypertensive treatment had adequately controlled blood pressure. How well are we doing?

Method

- A report writer/tool was created (aided by technical support

staff) to extract clinically relevant data already entered into our patient management system (Houston VIP).
- From a period of approximately six months (01-01-08 until 09-07-08), we identified all patients on antihypertensive medication (a list of 22 medications) whose blood pressure had been recorded. The tool extracted the most recent blood pressure measurement from each patient.
- The patient group was arranged into sitting blood pressure ranges according to WHO guidelines.[1,2] These arbitrarily defined three categories of acceptable blood pressure, and three categories of hypertension (see Table 1). Hypertension was defined as a blood pressure greater than or equal to 140/90 (the higher category applying if diastolic and systolic categories differed).

Results

Two hundred and seventy-nine patients were identified from the practice. They were any age or sex, but were on antihypertensive treatment, and their blood pressure had been recorded during the six month audit period (01-01-08 to 09-07-08).

Overall, 143 patients (51.3%) had acceptable blood pressures of less than 140/90 and 136 patients (48.7%) had unacceptable blood pressures of greater than or equal to 140/90.

Conclusion

Blood pressure control in patients on antihypertensives within our practice is less than optimal. On face value it appears that we are woefully short of the target. Only slightly more than 50% of our treated patients lie within the acceptable range of less than 140/90. This figure is potentially underestimated as we could not identify patients with chronic renal failure or diabetes separately, whose target is even lower at less than 130/80.

However, although there is huge room for improvement, our data doesn't seem as dire when compared with literature[3] that has shown that up to 75% of patients with hypertension do not have adequate blood pressure control.

This audit has many limitations. The duration of study was short. Although it would be hoped that all hypertensive patients' blood pressures were recorded in the last six months, this audit may have in fact missed a group of non-compliant patients, arguably at high risk. As previously mentioned, diabetic and chronic renal failure patients were not identified separately. Also, the recording of a single blood pressure was problematic as it did not show a trend and could not identify those patients in an early phase of management. The recordings were from a multitude of sphygmomanometers and operators, so accuracy could not be confirmed. The audit also relied on operators to enter the blood pressure onto the patient management system; some readings may have not been recorded.

Regardless of the accuracy of the audit, it is obvious that attaining acceptable blood pressures is very difficult. The reasons for this are likely to be multi-factorial. For example, patient factors may include poor understanding and compliance. Also, risks of lowering blood pressure may be perceived to outweigh benefits in some individuals. Medication factors may include limited efficacy (especially with monotherapy) and insurmountable side effects.

Figure 1. Blood pressure categories from patients on antihypertensive medication (Jan 2008–July 2008), by WHO categories.[1]

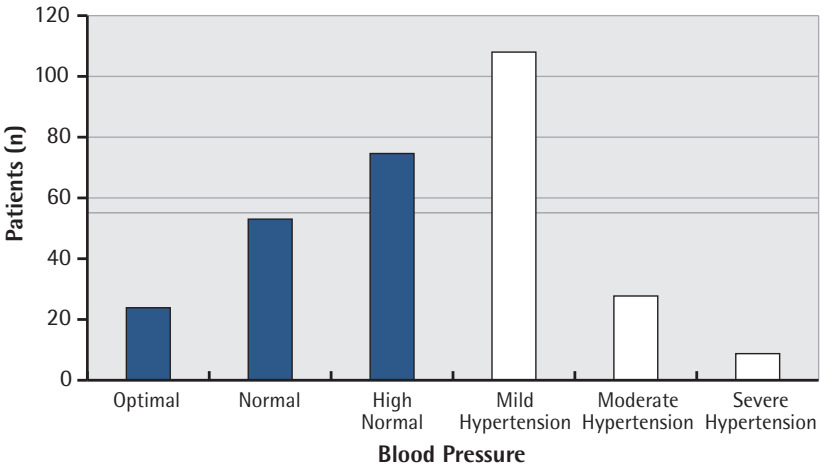

Table 1. Most recent blood pressure recorded from patients on antihypertensive medication (Jan 2008–July 2008), by WHO categories.[1]

Blood pressure	Range	Patients (n)	% of all patients
Unacceptable			
Severe hypertension	>180/>110	6	2.2
Moderate hypertension	160-179/100-109	25	9.0
Mild hypertension	140-159/90-99	105	37.6
Acceptable			
High normal	130-139/85-89	72	25.8
Normal	120-129/80-84	50	17.9
Optimal	<120/<80	21	7.5
Total		**279**	**100**

Health professional factors may exist and could include incomplete adherence to the guidelines. However, the discussion of these reasons is beyond the scope of this audit. A qualitative study looking at this in depth could be beneficial.

This audit has been useful for a number of reasons. A hypertension report writer is now in place at the practice; a further audit in the future could judge any improvement. For me, it is a reminder that the guidelines are specific and for a reason. For each patient with hypertension, the target of less than 140/90 should be a priority, in order to reduce cardiovascular disease and mortality. Anything short of this needs an explanation.

Acknowledgements

With thanks to Dr Buzz Burrell for his guidance and enthusiasm. Thank you to the team at Springlands Health and to the Houston VIP support staff involved in developing the report writer.

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Flu vaccine intervention in general practice: How successful is the flu vaccine alert system?

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'I came to New Zealand in 1999. I previously trained in South Africa, and have been practising as a full-time GP Anaesthetist in Wanganui for the last nine years. I recently changed my career direction, and joined Springvale Medical Centre in Wanganui, and now work full-time in general practice.'

Aim

To determine how successful the 'Flu vaccine alert' system (loaded on our Practice Patient Management System (PMS) – MedTech32) has been in influencing our Influenza vaccine uptake percentages in patients 65 years and over, who were eligible for a free vaccine, and who were enrolled at the practice from 1 March 2008 until 30 June 2008.

Introduction

Influenza remains a disease of public health importance in New Zealand. Influenza is a serious disease, and older people are more likely to experience severe consequences of influenza.[1] They have higher hospitalisation rates and higher mortality rates.[2] The higher risk of complications from influenza is the rationale for recommending influenza vaccination in the 65 and over age group, as influenza vaccination is effective in preventing morbidity and mortality from influenza in older people.

In New Zealand influenza vaccination became available free of charge to people aged 65 years and over in 1997. Since then, vaccination coverage has increased in this age group – from 39% in 1997 to 59% in 2000, and the National Target Aims were set at 75% for both the 2007 and 2008 flu vaccination seasons.

Identifying factors associated with influenza vaccine uptake is important to enable public health campaigns to tailor their advice to eligible patients more effectively. For example, a recommendation from a patient's doctor has still been shown to have a major influence on the patient's decision to be vaccinated, even when they did not initially want the vaccination.[2,4,5] FLUVAX® and VAXIGRIP® were the two influenza vaccines subsidised for the 2008 season.

Method

An electronic 'Flu alert' message was placed on the file of every enrolled patient ≥65 years and our practice did not actively recall patients at the beginning of the 2008 flu vaccine season. Research has shown that a significant proportion of people (over 90%) who were eligible for a free flu vaccine visited the doctor in the time period when the flu vaccines were available.[2] This year the eligible free flu vaccine season ran for a four-month period from 1 March 2008 until 30 June 2008. This was a local Primary Health Organisation (PHO) driven initiative and involved all practices enrolled with the PHO.

- The medical centre is a four doctor practice.
- A retrospective audit was performed on all enrolled patients ≥65 years at the medical centre, over the four-month flu vaccination period (1 March 2008 – 30 June 2008).
- These patients automatically had the flu-alert system loaded.
- Each time a patient was brought up on the PMS the flu alert 'popped up' on the computer screen.
- Using query builders loaded on our PMS, I looked at all patients ≥65years enrolled with our practice in the 2008 season, deter-

Table 1. Flu vaccine-eligible enrolled patients ≥ 65 years as at 30 June 2007 and 30 June 2008

	Eligible ≥65 years	Untraceable	Contacted (%)	Given (%)	Declined (%)
2007 practice	1048	36	1012 (96.6)	675 (64.4)	337 (32.2)
2008 practice	1179	40	1139 (96.6)	783 (66.4)	356 (30.2)
2007 PHO	9870	538	9332 (94.4)	7033 (71.1)	2299 (23.3)
2008 PHO	9673	266	9407 (97.3)	7065 (73.0)	2342 (24.2)

National Targets ≥ 65 years for 2007 and 2008 ≈ 75%
National Uptake ≥ 65 years for 2007 ≈ 63.66%
National Uptake ≥ 65 years for 2008 ≈ Unknown at time of completion of audit – 30 June 2008

mined how many of these patients were offered the flu vaccination, how many were actually given the flu vaccine, and how many patients declined the flu vaccine. I then compared these figures to 2007 figures.

- The PHO practice facilitator provided me with the PHO flu vaccination figures for 2007 and 2008 for the greater region, and also provided me with the national target figures for both 2007 and 2008. I was able to obtain the national uptake figures only for 2007, as the national 2008 uptake figures were still not available at time of completion of this audit.
- I then collated the data, and tried to ascertain why our figures were, firstly, lower than the PHO averages for both 2007 and 2008, and then I tried to ascertain whether the flu alert system which was loaded for this season (2008) actually influenced our flu vaccine uptake figures in our practice in 2008 compared with figures in 2007, where no alert system had been loaded.
- At the end of the season (30 June 2008), I conducted interviews with practice nurses, my colleagues and the reception staff, to determine what communication channels were followed and what conversations were held with patients concerning their eligibility for flu vaccination. From this information I could determine what systems were in place, and what reasons were given by patients who declined the flu vaccination. I summarised their comments, and tried to establish how we could improve our uptake in the forthcoming flu vaccine season (2009).
- I tried to determine what implications this had on our practice, and how we could possibly change the way we practise to achieve better results in our practice next year.

Results

The audit results are shown in Table 1. The percentage of enrolled patients ≥65 years who were contacted remained the same at about 96% in 2007 and 2008, which was encouraging as our practice's enrolled patient numbers increased. These were comparable with the PHO figures of enrolled patients ≥65years contacted in 2007 and 2008.

From the figures above 66.41% of patients ≥65 years were given their vaccine in both the 2007 and 2008 seasons, despite our enrolled patient numbers increasing by 131 patients. In addition, 121 of these patients moved from other practices, and a large number of the flu vaccines were given prior to them joining our practice. These figures illustrate that the practice's PMS flu alert system loaded did not actually have a significant effect on our practice uptake figures in 2008.

Our practice uptake figures, however, were still lower than the PHO uptake figures at 71.1% (2007) and 73.0% (2008) respectively. Percentages of enrolled patients ≥65 years who declined flu vaccination reduced by 2% from 32.15% (2007) to 30.19% (2008), despite our practice enrolled numbers increasing. These percentages were still higher than the PHO figures which were 23–24% for both years (2007/2008).

The reception staff found that they often did not have the time to alert patients concerning their vaccine eligibility when phoning to make an appointment, and sometimes ignored the flu alert pop-up loaded on the PMS system.

The reception staff was extremely busy at times, largely due to the influx of newly enrolled patients from 1 April 2008, when I joined this practice. Our reception staff were not informed about how to inactivate a flu alert pop-up, or educated on how to load a decline in the system, and they did not have the time to do this when patients phoned to make an appointment. They would often refer patients to the practice nurse if they specifically enquired about the flu vaccine, and if they declined, they were also told to contact the practice nurse or doctor.

Advertising in the practice included two large posters in the waiting area, and one at the front desk. Flu pamphlets were also available in the waiting area ('The facts about influenza' – available on order from influenza.org.nz), and available at the beginning of the immunisation season. The PHO produced a 'YOU ARE ELIGIBLE FOR A FREE FLU-VACCINE' flyer designed to be given to patients as they 'clerked' in at the front desk. This was not used.

All our practice nurses did routinely offer the flu vaccine if time allowed this, even if the patient had been seen for other issues. The most common reasons for decline were: *'I have never had a flu vaccine before'*; *'I got the flu from the vaccine the last-time'*; *'I have always been well'*; *'I heard that a friend got the flu from*

the vaccine'; *'I don't have the time today to wait for twenty minutes after the vaccine has been given.'*

Doctors in our practice encountered the flu alert pop-up at the beginning of the consultation or on opening the patient's records prior to the consultation, and then sometimes forgot to mention the free flu vaccine eligibility to the patient in closing the consultation. My colleagues were therefore not convinced that this was a helpful tool, for these reasons. The practice nurses found the flu alerts helpful, but sometimes found it more of a menace when patients were phoning for repeat prescriptions, and they more often than not did not have adequate time available to address this with the patients.

Discussion

Based on the results of this audit, I determined that I needed to explore reasons as to why patients decline the flu vaccine, and how we can improve our practice strategies, developing methods which improve our uptake numbers. It was obvious that the flu alert system loaded did not really influence our uptake.

Strategies to increase influenza vaccination uptake can be categorised as client-orientated (such as mail and phone recalls), provider-orientated (such as chart reminders, screening or setting a patient task), and system-orientated (such as standing orders or an alert system). All of these have been shown to increase vaccine uptake, although system-orientated strategies seem to be the most effective.[1]

Influenza vaccination coverage among high-risk groups in New Zealand still however remains sub-optimal according to National Target uptake figures. Overseas studies[1] have shown that patient attitudes and beliefs influence influenza vaccination uptake, and my findings support this, from the comments made by patients to the nurses.

Provider recommendation from a patient's doctor has been shown to have a major influence on the patient's decision to be vaccinated, even when they did not initially want the vaccination. A nurse's recommendation is also a positive predictor of vaccine uptake.

Some patients will still take no notice despite recall letters and reminders. Others however have taken their own initiative and have come in requesting the flu vaccine, without receiving recall letters.

Benefits of this audit

The following points were highlighted as possible ways in which we could improve our practice uptake figures next year:

1. Better teamwork and a three point team approach involving effective communication between front desk, practice nurses and doctor.
2. The development of a more personalised recall letter in the next flu vaccine year – 2009, providing better patient education and motivation, especially in previous decliners. This would however be more costly (postage, printing and administrative costs) than pop-up flu alert systems.
3. Effective educational advertising both locally and nationally to support the uptake of the vaccination.
4. Informing patients in advance that they will have to wait for the 20 minutes following the flu vaccination. This could be done in the flu vaccine recall reminder document in the outbox document folder.
5. Issuing all patients who register at the front desk with an 'Eligible for Free Influenza Vaccine' flyer, if they meet the criteria.
6. Regular query builders during the course of the flu vaccine season would be beneficial.
7. Educate patients to inform their friends and relatives who might be eligible, creating a much broader more robust campaign of education for our patients.
8. Well informed 'flu' conversations with our patients, by doctors and practice nurses. This could be started at the initial contact by our practice reception staff.
9. Better attendance by our practice staff at the 'Flu-Vaccination Intervention' educational and information evening, which was found to be extremely informative this year.
10. Adequately inform practice staff that flu alerts are going to be placed on patients at the start of the 2009 flu vaccine season if this will still be the case in the next season.
11. Educate our practice staff on how to correctly offer the flu vaccines to patients. Emphasize the importance of taking notice of the patient alerts, and recording this information to those offered, given and declined in the immunisation schedule.
12. Offer an educational evening for all practice staff, and also provide them with possible answers to frequently asked questions by patients. These are available on the link www.influenza.org.nz
13. Introduce role play exercises with practice staff to improve confidence when discussing vaccine options with patients, especially in previous decliners.
14. Additional message on our practice phone message system at the beginning of the next flu vaccine season informing and reminding our patients that the flu vaccines are in stock and available.
15. Practice flu clinics on a weekly or twice weekly basis with one of our practice nurses.
16. Practice nurse initiating discussions with patients in the waiting area who were awaiting consultation with the doctor, and also offering vaccine to them while they are waiting.
17. Educating and targeting younger age groups about the benefits of vaccination in healthy older adults.
18. Encouraging recommendation for flu vaccine by a patient's family members and/or friends would also be an important factor in possibly targeting the 65 years and over population group.

Finally, did the pop-up flu alert system motivate the GPs in our practice to ask their patients if they wanted the flu vaccination? I personally found this a helpful tool, although I

was often distracted by other issues or complaints that the patients presented with at the time of the consultation. All of my patients in this period were new patients and had recently enrolled or moved from other practices in the region. I would often exit the flu alert and then forget to mention this at the end of the consultation. The flu alert system did however emphasize my role to inform patients and offer the flu vaccine, and this has now become routine in my consultations in the ≥65 years age group.

The primary health care sector is pivotal in promoting and administering influenza vaccine to those at risk in the community, and research overseas and in New Zealand, clearly identifies a general practitioner's or practice nurse's advocacy as being the most important influence on a patient receiving the influenza vaccine.[1,5] The patient's doctor is still top of the poll as the professional that the public trust the most with people's health issues,[6] and we should make a concerted effort to recommend the vaccine to all patients ≥65 years.

Acknowledgements

Special thanks to Angela Johnson RN – practice facilitator – Whanganui Regional Primary Health Organisation (WRPHO).

Thanks to our practice staff at Springvale Medical Centre for their assistance in conducting this audit.

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The use of complementary medicines by patients with osteoarthritis

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'I qualified from Bristol in the UK in 2002, and worked predominantly in internal medicine (with a bit of ED and intensive care thrown in for good measure!) for four years before moving to New Zealand with my partner. The decision to move out of hospital medicine and into general practice was not one that I took lightly, but I am pleased to say that I have enjoyed this last year more than any other in my career so far. I love the Hawkes Bay and am excited about practising there, although a temporary career break is looming with both a baby and a wedding on the way!

As a major cause of locomotor disability and pain, it is important we know how to manage osteoarthritis (OA) effectively. The aims of management are to educate the patient, reduce pain, optimise function and minimise progression. Although there is no preventive or curative drug treatment available, a large number of complementary or alternative medicines (CAMs) are promoted as beneficial to patients with OA.

I was asked by a patient with OA whether any CAMs might help her. Unable to answer her question immediately, I was prompted to find out what complementary therapies are available, and to research the evidence for these. Her question formed the basis of this research project.

Aim

To discover, among patients with osteoarthritis:

1. What proportion is taking CAMs for the condition?
2. What are their expectations from their GP regarding his/her knowledge of CAMs?

Method

Using MedTech query builder I searched for registered patients who had been given a 'classification within osteoarthritis' 'between 06/05/05 and 06/05/08'. This gave me a list of 59 patients. I reviewed each patient file and excluded: patients with other diagnoses of significance e.g. haemachromatosis, SLE; patients I was unable to find on the system; patients to whom I had given the classification; patients over 90 years of age.

I obtained consent from GPs in the practice to include their patients in my survey. I then constructed a questionnaire enquiring about the use of both prescribed and non prescribed medicines for OA, and sent this by post with a covering letter to the 51 remaining patients, including a stamped addressed envelope for its return.

Results

Thirty-seven completed questionnaires were returned to me. Five patients indicated that they had not been given a diagnosis of OA and therefore answered no further questions. These patients were excluded, giving me a study group of n=32, of whom

18 (56%) reported taking CAMs for OA. Of these, seven (37%) took glucosamine alone, another seven took glucosamine and/with chondroitin, three (16%) took glucosamine and/with chondroitin and/with methylsulphonylmethane (MSM), nine (47%) took 'fish oil' (one of whom specified salmon oil), one took 'kruschen salts'.

Fifteen patients reported the use of prescribed analgesics for their OA, of whom 10 (66%) were taking at least one CAM. This was comparable to nine (53%) of the 17 patients who do not identify any prescribed medications for OA. Of the 13 people not taking any analgesics at all (neither prescribed nor over-the-counter (OTC)), eight (62%) were taking CAMs, compared to 11 (58%) of the 19 who were taking some form of analgesic.

Patients taking any CAM were asked 'from whom/where did you hear about these medicines?' Many had heard from more than one source. A total of nine patients (50%) had heard from a friend/relative, six (33%) from the TV, five (28%) from their GP, two (11%) from the radio, two (11%) from a magazine or newspaper, one from the Internet, and one from an 'other source', which was in fact an orthopaedic surgeon.

Of those who heard about CAMs from their GP, all five were taking glucosamine and chondroitin, in addition, two were taking fish oil, and one MSM. Five (28%) of this same group of patients reported that their GP was not aware of their use of CAMs. The reasons given for this were: *'I didn't think s/he would approve'*, *'I didn't think s/he would be interested'*, *'s/he didn't ask*.'

Twenty-nine of the 32 patients responded to the question 'if you wanted information regarding CAMs, who would you ask?' Many gave more than one response. Twenty-five (86%) said they would ask their GP, compared to nine (3%) opting to ask their pharmacist, two would ask friends/family, two would ask staff in health food shops, one would ask 'a specialist' and one would ask a naturopath.

Discussion

With over half of patients with OA using CAMs for the condition, and 86% stating they would go to their GP for information regarding CAMs, it is clearly important that we are adequately prepared to inform and advise them in this area. Whether or not we are prescribing analgesic and/or anti-inflammatory medications, we must be aware of the numerous CAMs available, and keep abreast of the existing evidence for their effectiveness, as well as any potential side effects, so that we can discuss these things with patients and ensure they are fully informed. Furthermore we should not assume our patients will tell us of their use of non-prescribed medications: instead, we must ask.

In this study fish oil was the most commonly used product, followed by glucosamine and glucosamine with chondroitin, then glucosamine and chondroitin with MSM. Of the 'GP-advised' group, all five were taking glucosamine and chondroitin, two fish oil, and one MSM. Although the use of fish oil supplements was frequently suggested in my reading, I was unable to find any supporting evidence from good quality randomised controlled trials (RCTs). Of all the CAMs available, glucosamine sulphate has been the study of the most research and although the evidence is not entirely consistent, most studies suggest that its use significantly reduces pain, improves mobility, and may slow the progression of OA. Less research is available on chondroitin sulphate and again, results are contradictory. Early studies suggested a benefit in terms of reduced pain and slower joint space narrowing, although more recent, arguably higher quality research suggests no benefit at all. Additionally, there is no evidence of greater benefit from a combination of glucosamine and chondroitin than from glucosamine alone. Finally, the evidence for MSM looks promising but is in its early days with just two RCTs suggesting benefit in terms of improved pain and joint mobility. More evidence is needed before we can widely advise its use for OA. There are numerous other CAMs available which I will not discuss here.

The future

This was a small study giving results of unknown statistical significance and unknown relevance to different patient groups. It has however, as intended, signalled that this is a topic that matters, both to our patients in terms of their requirements (for information and treatment), and to us in terms of the information we must equip ourselves with in order to best manage osteoarthritis. But do we already have this information? This study gives no indication. It would be interesting to survey GPs regarding their knowledge of the evidence for CAMs available for OA. I personally have never been taught about CAMs, but perhaps we should receive more formal education in this area given the apparent expectations of our patients.

In terms of my own future practice, I have produced a patient information leaflet summarising the evidence on the use of CAMs for OA which I will use a basis for discussion with them and which they can take away for reference. We will all have to work hard to keep abreast of the constantly changing evidence.

References

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