In the current general practice setting, patients with chronic asthma are being left behind in the quest to raise awareness and increase uptake of the flu vaccine in those who qualify as a ‘clinical risk’. In most healthy adults, the influenza virus can produce an acute respiratory tract infection that is self-limiting, with full recovery in two to seven days. Unfortunately, serious illness and hospitalisation can occur in some patients. The Centers for Disease Control and Prevention (CDC) strongly recommend that people in certain clinical risk groups receive the flu vaccine from their GP to avoid these complications.2,3

The HSE and the Health Protection Surveillance Centre (HPSC) strongly recommend the vaccine is administered to those with chronic respiratory disease, including those with moderate to severe chronic asthma.4,5 The UK Department of Health further classifies people with asthma who need the flu vaccine as those “requiring continuous and repeated use of inhaled or systemic steroids or with previous exacerbations requiring hospital admission”.6 Questions arise as to whether this clinical risk group is being vaccinated adequately in the GP setting.

Defined criteria

The defined criteria set for this audit stated that all people with asthma requiring continuous and repeated use of inhaled or systemic steroids or with previous exacerbations requiring hospital admission (people with chronic asthma) should be vaccinated against influenza on a yearly basis in the GP setting prior to the initiation of flu season.

Methods

The audit took place in a community medical centre in Co Kerry, with 12,058 patients in the care of four practice physicians. All information was acquired through the electronic Health One database, requiring no patient interaction and, therefore, no ethical approval was needed. All active patient files were searched for ‘asthma’ under the following subheadings: diagnosis, assessment, subjective symptom, and past medical history. This was done to capture all patients with asthma in the practice and account for variability in practitioner recordkeeping.

Each clinical record included in the results was individually searched and information was gathered on each patient’s sex, age, usage of inhaled or oral steroids, or hospital admissions related to their asthma since 2005, flu vaccination status for the 2012/2013 season, any refusals or contraindications to the vaccine noted, and past season flu vaccinations. Asthma-related steroid prescriptions not renewed since 2005 were not considered to be chronic asthma due to the length of time since steroids were necessary.

Results

Of the 12,058 patients within the practice, 625 were isolated using the initial ‘asthma’ search. On examination of each record, 144 of these patients did not meet the initial search criteria for asthma and were excluded. Reasons for exclusion included mislabelling, asthma not being the end diagnosis, no longer active patients, deceased or duplicated.

Patients with asthma who had received the flu vaccine this season included 9.6% (46/481) of the entire asthma population. Of the 481 asthma patients, 228 (47.4%) were considered chronic under the UK classifications. Those between the ages of six and 20 years comprised 32.0% (73/228) of the chronic asthma population. In total, 18.4% (42/228) of all chronic asthma patients within the practice received the flu vaccine for the 2012/2013 season. Those over 65 years made up 42.9% (18/42) of the chronic asthma patients who had received that vaccine (see Figure 1). For all chronic asthma patients who received the flu vaccine this year, exactly 50.0% (39/78) also received the vaccine in past flu seasons.

Discussion

This audit shows that guidelines concerning flu vaccinations for people with chronic asthma are not being met.
There may be many reasons for this:

- Lack of awareness of their clinical risk status
- No previous emphasis on vaccination of chronic asthma patients
- Patient concerns about the vaccine
- Concerns that urging a young and seemingly healthy population to be vaccinated is unwarranted or unnecessary.

No adverse effects have been shown to occur in asthma patients given the vaccine and research shows that, especially in children between one and six years with asthma, severity of illness can be abated and exacerbations prevented. The vaccine is considered an important part of appropriate management of these patients.

Encouragement from a GP is often the primary reason for those with risk status to receive the vaccine.

In research by Szucs and Müller in 2005, flu vaccination rates increased when family doctors recommended the vaccine to patients. In their research, this was the second most common reason why people chose to be vaccinated (55.2%); the perception of the flu being a severe illness was number one (55.8%). This is an important point to consider when finding ways to increase flu vaccination uptake in the GP setting.

A possible contributor to the low vaccination rates may be the choice of patients to receive their vaccination at places other than their primary GPs office. In a study done at Duke University in United States to determine the proportion of asthmatics receiving the flu vaccine over two consecutive years, approximately 40% of reported vaccinations in all asthmatics surveyed were done at a places other than their primary GP. These places included work (18%), health department (5%), another doctor (5%), or pharmacy (5%), among others.

Limitations in this audit included possible under-representation of asthma patients that should be receiving repeated steroids but fail to report to their GP regarding symptoms, possible prescribing of steroids to patients who may not need them for their asthma, and seasonal patients included in this audit who may have been vaccinated in another practice.

Improvements

Improvements have already been made to the identification and management of chronic asthma patients in this medical centre. Chronic asthma is now clearly stated under patients’ ‘past medical history’ within their basic medical information in the clinical database for all physicians to see. This will effectively link all chronic asthma patients into a specific database, allowing easy tracking to be used in a variety of ways. First, prompts can be created for physicians to discuss flu vaccines during a patient’s next visit to the surgery. Additionally, the database can be exported into a pre-formatted letter, sent to each patient reminding him or her to come in for a flu shot this season. These efforts alone increase awareness among patients and can increase compliance with minimal effort or extra time required by the practice. It also allows for easy re-auditing in future seasons.

The practice is also currently in the process of establishing spirometry for all suspected asthma patients and a tighter monitoring system managed by both physicians and a practice nurse with a special interest in respiratory disease. In the post-flu season of 2013/2014, this database of asthma patients will be re-audited, hopefully showing a pronounced improvement in the uptake of the vaccine. But for now we wait, and hope other practices follow suit.

Conclusion

Influenza vaccination in the 2012/2013 season was been suboptimal in chronic asthma patients within a semi-rural GP setting in Co Kerry. It is likely that this trend is similar in many other practices across Ireland. With the 2013/2014 flu season now upon us, it is imperative that physicians take a more proactive approach to the care of their chronic asthma population when it comes to vaccination against influenza. Emphasis on GP recommendation of the vaccine to patients with chronic asthma may also considerably increase uptake in this population.

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