Prevention always better than cure

Dr George Roberts offers a personal perspective on the RHASP project, in which his practice is involved

The practice was first invited to participate in the RHASP (Reduction in Heart Attack and Stroke through Prevention) project approximately two years ago. This is a collaborative project between the Blood Pressure Unit in Beaumont Hospital, Primary Care through six local practices and the Department of Health .

We were excited by this proposal because it appeared to offer us the opportunity to improve the management of our hypertensive patients, through better control of existing patients and more accurate detection of new cases.

The project would allow us to stratify our cardiovascular patients into low medium and high risk groups. Thus this initiative would help us to deal more effectively with the epidemic of cardiovascular disease we encounter in our practice.

The project incorporates the dabl cardiovascular software management systems. Use of this management system is a crucial element of this project. This system has been developed in Beaumont Hospital and has built up a very large database of 25,000 patients.

Key elements of the project are:

- Nurse led clinics which use common protocols for hypertension and cardiovascular risk factor assessment.

- Access to the dabl software system via high speed link
- Accessing and using a common database in Beaumont Hospital allows us to share information on patients with the hospital and thus use a common system of monitoring, particularly on our high risk patients.

Ambulatory blood pressure monitoring

Our practice nurse has played a key role in this initiative. Any patient who is presenting for the first time with hypertension or who has existing hypertension but appears to be poorly controlled is referred to the nurse for ABPM (ambulatory blood pressure monitoring). After wearing the monitor for 24 hours the patient returns to the nurse who uploads the date from the monitor to the dabl software system and this generates an immediate report which profiles the patient's blood pressure.

This is a one page report which plots the patient's blood pressure and gives an interpretive report of the results. This has the advantage of identifying those patients with:

- White coat hypertension thus avoiding unnecessary treatment.
- Systolic hypertension particularly in the elderly.
- Nocturnal hypertension and particularly those patients who are 'non dippers'. (Blood pressure should drop by about 15%, during the night, in normal patients).
- Episodes of undiagnosed hypotension.

The report is presented to the patient's doctor who recommends appropriate management after reviewing the patient's history.

Cardiovascular risk factor assessment

Patients with established Ischaemic Heart disease or those who are thought to be at high risk by virtue of having multiple risk factors are offered full cardiovascular risk factor assessment. This is a nurse led initiative. Patient who are entered into the RHASP project are offered a full assessment by our nurse including blood pressure measurement(abpm measurement if indicated), lipid levels, weight, BMI, blood glucose, smoking history. Family history of IHD, lifestyle characteristics such as alcohol intake, exercise and salt intake are also recorded.

This information is again uploaded to the dabl software system. This system records tabulates and presents the data in flow chart form. The patient is given a risk score which is colour coded, red for high risk, orange for medium and green for low risk.

The patient is also given a Framingham 10 year CVD risk score expressed in percentage terms. This allows for risk factor modification and facilitates further monitoring by allowing us to easily identify those patients which fail to progress.

Synopsis of the RHASP project

- The RHASP project has brought significant benefit to the practice and has resulted in improved care for our patients at risk of cardiovascular disease.
- The analysis and presentation of data in RHASP brings significant benefits for individual patients.
- We have had the benefit of observing RHASP and Heartwatch operating alongside one another and I feel the future will lie in one system, utilising the strengths of both systems.

These patients are then managed by:

- Attempts to modify these risk factors, such as lifestyle advice
- Using predetermined targets for cholesterol and blood pressure
- Shared care of very high risk patients between primary care and the hospital.

The practice nurse

The role of our practice nurse is crucial to the success of this project. Once referred for assessment, the nurse will do most of the work. They collect all of the initial data and will follow the patient up and review the patient at regular pre determined intervals.

The practice nurse can ensure that all protocols are adhered to and that we reach our predetermined treatment levels.

Heartwatch versus RHASP

It has been very interesting to observe these two projects which are progressing contemporaneously within the practice.

I believe they are similar in the following respects:

1. The aim of both projects is to bring about a reduction in our cardiovascular disease morbidity
2. They both attempt to identify high risk patients and modify their risk factors
3. They are nurse led
4. There is an attempt to use advanced information technology to upload large quantities of information to a common database
5 .These projects are protocol driven with predetermined treatment goals for hypertension and cholesterol.

However they are key differences in RHASP which I believe are important.

Differences from Heartwatch

The manner in which the data is collected analysed and presented is very important.

- The presentation in flow chart form, colour coding and numerical estimation of CVD risk, allows easy identification of the high risk patients and enables the doctor or nurse to decide, quickly and easily on appropriate management, for an individual patient.
- Presentation of the data in this way allows us to see if treatment goals have been achieved and whether it has been possible to reduce the patient's risk category. This facilitates follow up and monitoring.

It has to be stated that RHASP is a collaborative project between primary and secondary care, whereas Heartwatch is based exclusively in primary care, but they share many common treatment goals.

It is my feeling that involvement in the RHASP project has had a profound impact on the management of our hypertensive patients. However because this a pilot study the number of patients entered into the full cardiovascular risk factor assessment has been small and hence the overall impact for our practice has been difficult to gauge .

However the whole project been subjected to an independent interim assessment.

This has been favourable. The results of this study are available on the website **www.dabl.ie** There have been wider benefits to the practice in the sense that the treatment goals used by RHASP are now widely recognised within the practice and have been adopted by all members of our team, in dealing with patients at risk of cardiovascular disease. The benefits are not confined to the patients directly involved with RHASP.

Involvement in RHASP has meant a very significant commitment in terms of practice resources, especially use of practice nurse time. As with any new project involving use of information technology, there were there problems initially, in getting the system to work consistently.

These have taken a while to iron out and occasional problems still persist in getting access to the system. ■

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