Brain Matters

Patients, healthcare professionals and policymakers call for stronger EU action to prevent strokes

Stroke is a devastating condition for individuals, communities and societies, yet many preventable strokes are not effectively prevented. This is particularly the case in strokes that result from atrial fibrillation – a heart rhythm irregularity that is common in Europe. This was the subject addressed by a roundtable hosted by the European Brain Council, as part of the programme of the EU Summit on Chronic Diseases in Brussels on 3-4 April which focused on identifying actions which the EU could undertake to support better prevention and management of chronic diseases.

> *"Another example of cost-effective prevention is to diagnose and treat atrial fibrillation so as to prevent stroke. This could save countless lives, with modest investment."*
>
> ***Tonio Borg***
> *EU Health Commissioner*

In his opening speech at the Summit, European Commissioner for Health Tonio Borg spoke of the diagnosis and treatment of AF to prevent stroke as an "example of cost-effective prevention [which] could save countless lives". The European Brain Council's roundtable demonstrated broad support for further action and identified a number of approaches to improve AF-related stroke prevention and save lives.

The Brain **our body's delicate control centre**

In a statement, **Professor Jerzy Buzek MEP**, former President of the European Parliament, set the tone for the meeting, underlining the importance of brain function for all aspects of life – movement, speech, writing, thinking. Suffering from a brain disease therefore also impairs a patient's ability to manage other chronic diseases, such as diabetes.

Stroke **the only currently preventable brain disease**

The burden of stroke in Europe is extremely high – the second-highest disease burden in Europe. Yet unlike many brain diseases, we can take effective, evidence-based actions to prevent some types of stroke. While most risk factors for stroke such as tobacco, alcohol, obesity and high cholesterol are well known, other risk factors are often overlooked.

The stakeholder roundtable was hosted by the European Brain Council and facilitated by Fipra with financial support from Pfizer and Bristol-Myers Squibb.

Atrial Fibrillation **a little known but important risk factor for stroke**

Atrial Fibrillation (AF) is the most common form of irregular heart beat, but the health risks associated with AF have only come to light relatively recently as it has become more widespread with lengthening life expectancy. One in four people over the age of 65 will develop AF and the prevalence is expected to more than double by 2050. However, far from being a harmless condition, AF increases your risk of getting a stroke by five fold, as well as increasing risk of heart failure and sudden cardiac death. 30% of people who experience AF-related stroke will never leave hospital, and another 20% will die within a year.

AF can be very easily detected by simply taking the pulse, and the stroke risk can be well managed through medication, so-called anticoagulants. These prevent formation of blood clots in the heart, which can then dislodge and travel to the brain, causing stroke. An estimated 70-80% of AF-related strokes could be prevented, if diagnosis and treatment consistent with international guidelines were universally offered, but this is currently not happening across Europe.

Awareness of AF among healthcare professionals and people with the condition is low, with disastrous consequences. **Claire Balmer**, for example, a cancer researcher from Warwick, UK, was only diagnosed with AF after suffering a stroke in October last year, an event which completely changed her life and that of her family.

Professor John Camm (left), lead author of the European Society of Cardiology's guidelines on Atrial Fibrillation, said that "there is no point in talking about the link between AF and stroke if we can't do something about it. But we can – we can give anticoagulants." However, despite the existence of cost-effective anticoagulant therapies ranging from the commonly-used warfarin to a newer class of drugs called Novel Oral Anti-Coagulants (NOAC) which have fewer interactions with food and other drugs, AF-related strokes are not being effectively prevented across Europe at present. This is because patients are not being diagnosed, are not being treated at all, or are being treated with ineffective medication like aspirin rather than an anticoagulant.

> *"we can prevent many strokes and many deaths."*
>
> ***Professor John Camm***
> *St George's London*

Discussion

> *"there are a lot of people out there with no symptoms who may have AF and do not know."*
>
> ***Rebecca Taylor** MEP*

During the discussion, there were strong calls for a more innovative and systematic approach to detecting AF. **Rebecca Taylor MEP** (right) called for a more structured approach to screening for chronic diseases including key risk factors for stroke like AF, which would make it easier for patients to find out their risk of future serious health problems such as stroke. Having one's pulse taken during a routine doctor's consultation would also serve to increase general awareness of AF as a risk factor for stroke. The general public do not associate cardiovascular conditions such as AF with stroke – this relationship must be communicated clearly in terms with which people can identify. In this way, people will become empowered to actively seek medical advice.

Detection of AF should also make use of a broader range of healthcare professionals. **Manuela Messmer-Wullen** (left) from the Stroke Alliance for Europe (SAFE) and others called for community nurses, pharmacists, dentists and other medical professionals to be trained to take the pulse and provide information on AF as well as making use of innovative diagnostic tools, such as portable ECG machines, which can facilitate detection of AF anywhere. Existing contact with these health professionals should be utilised as an opportunity to detect and raise awareness of AF.

Many participants challenged the division of cardiovascular and neurological medical professions and approaches into silos. AF as a cardiovascular condition leading to a neurological one illustrates how closely linked heart and brain actually are – a relationship which requires a holistic therapeutic approach.

There appears to be some reluctance to screening for AF and the provision of anti-coagulation therapy, due to concerns that this would drive up the burden on human and financial resources of health systems. Treatment of conditions is often seen as a cost, but in the case of AF, anticoagulation is primarily a preventive measure which can ultimately reduce the burden of stroke on health systems and help improve the long-term sustainability of chronic disease management in the EU.

Role for the EU

While the provision of healthcare is of course a national competence, it is important for the EU to recognise stroke and AF as major chronic diseases alongside cancer, diabetes or respiratory disease, and to highlight the opportunities for its prevention as a long-term investment in the sustainability of health systems.

Concretely, the EU could support Member States in the monitoring of AF and AF-related strokes, as well as benchmarking outcomes following the implementation of clinical guidelines. In Professor John Camm's words: "We need to understand what drives different outcomes in different health systems, and find models for AF management that will work across Europe." In this way, the EU would make a significant contribution in reducing the burden of stroke on individuals, families, health systems and our economies for many years to come.

Policy recommendations

Stakeholders concerned about AF-related stroke call for Member States and the European Union to:

- Support awareness campaigns informing the public about Atrial Fibrillation, its signs and symptoms, its relationship with stroke, and urging people who may have experienced symptoms or are over 65 to have their pulse taken;
- Take advantage of existing contacts between the public and health professionals such as pharmacists or dentists to offer pulse-taking and raise awareness of AF;
- Adopt a more systematic approach to screening of Atrial Fibrillation including pulse-taking in regular medical check ups with appropriate follow-up in cases where a person is diagnosed with AF;
- Encourage implementation of the European Society of Cardiology's latest clinical guidelines, published in 2012, to ensure people with AF are offered consistent access to and choice of appropriate anticoagulation therapy to manage their stroke risk;
- Break up the silos between cardiologists and neurologists to ensure that conditions such as AF do not fall through the gap.