Joseph Kamtchum Tatuene

All about STROKE

AN INFORMATION GUIDE
FOR THE PUBLIC

STROKE
ACTION
AVC

Joseph Kamtchum Tatuene

All about stroke

An information guide for the public

ISBN numérique : 979-10-439-1602-1

Librinova

www.librinova.com

Disclaimer :

This is an AI-assisted translation of the book « Tout savoir sur l'AVC – Manuel d'information a l'usage du grand public ». It was generated, reviewed, and edited by the author to ensure the content matches that of the original version in french.

DEDICATION

To my family, my invaluable and unwavering support.

To patients, who are admirable teachers.

To God, who makes everything beautiful in its time.

FOREWORD

Patients with stroke and their families have thousands of questions they would like to ask their GP or neurologist – for those lucky enough to have one. Unfortunately, healthcare professionals are often too busy to answer them or simply do not have the right information. Worse still, they are not always accessible outside their hospital or university ivory towers. In routine medical practice, the time devoted to health education is limited, particularly in certain countries where the duration of a neurology consultation is reduced to the bare minimum. The only people who are fortunate enough to receive nearly comprehensive information are patients with stroke who have the privilege of being treated in appropriately staffed neurovascular units. But this information comes too late ; the damage has already been done, and with irreversible lifelong consequences. Furthermore, the often extensive and complex information provided in neurovascular units is delivered at a time when stroke survivors are the least attentive or able to make conscious lifestyle changes.

It is therefore urgent and essential to take this knowledge out of hospitals and lecture theatres and make it available to the public, so that people can understand their risk factors, make adequate lifestyle changes to protect their health, and respond appropriately if a stroke does occur despite their best efforts. This is why I have committed myself to writing this information booklet. As a neuro-epidemiologist*, my driving passion is to improve people’s health and protect them from diseases affecting the nervous system. I believe that every stroke that occurs in a person’s life is one too many, regardless of its severity. Every stroke that occurs represents yet another collective failure on the part of those responsible for safeguarding public health and, specifically, brain health.

I wanted the content of this book to be straightforward, easy to read and accessible to people with no specific background in science, medicine or biology. Indeed, most communications about stroke are either sporadic, provided only during health campaigns or themed days, or too complex because there are conveyed in overly technical or even obscure language, or they are scattered across various websites and platforms with no guarantee of reliability. In contrast, this book, written in a question-and-answer format, focuses on the basics to initiate and guide dialogue with healthcare professionals. It could also facilitate their work in providing therapeutic education and save them time

during consultations.

Nevertheless, I would like to point out that stroke prevention and management are far more complex than is presented in this handbook. Its aim is, therefore, not so much to replace as to facilitate interaction with healthcare professionals and to offer temporary support to patients when their carer is too busy to answer their questions. I very much hope that this book will help people to take good care of their health, and also help patients with stroke and their families to understand what care and services they are entitled to before, during and after a stroke. It is a resource that people should carry along, read and reread, share and discuss with their loved ones.

PART 1 :
DEFINITIONS AND MAGNITUDE OF THE PROBLEM

Question 1 : What is a stroke ?

Stroke refers to any sudden dysfunction of the central nervous system* caused primarily by an abrupt and unexpected damage to the blood vessels.

The condition is described as ‘sudden’ or ‘abrupt’ because it generally occurs within a fraction of a second or a few seconds. This sudden and unexpected nature is important in distinguishing a stroke from other disorders of the nervous system, which may have similar symptoms but generally develop over several days, weeks, months or years. We will return to this later when we discuss the question ‘How can you tell if someone is having a stroke ?’.

The term ‘dysfunction’ refers to a functional abnormality that can affect any part of the central nervous system. In some rare cases, stroke can also affect the retina i.e., the part of the eye that transmits visual information to the brain, enabling us to identify and interpret what we see in our daily lives.

This functional abnormality is most often a reduction of the normal activity leading to symptoms such as paralysis of the face or limbs, loss of the ability to communicate (speaking, reading, understanding others), partial or total loss of vision, and loss of the ability to feel the touch, or distinguish hot from cold objects with the skin. However, some strokes may cause an increase in the normal activity instead, or even an imbalance between two or more existing functions. This results in symptoms such as headaches, seizures, involuntary movements that are difficult to control, dizziness or gait and balance issues.

When we talk about damage to blood vessels, this refers to either a blockage or a rupture (bursting, tearing) of the vessels. These is a wide variety of mechanisms that could potentially lead to these two types of blood vessel damage. We will discuss these in detail when we address the question ‘What causes a stroke ?’.

Whether it is a blockage or a rupture of one or more blood vessels, the result is always a more or less severe reduction in blood supply to a more or less extensive area of the nervous system. However, the nervous system depends on this blood supply to function normally. This is why we see a dysfunction, leading to various types of symptoms.

Question 2 : What are the different types of stroke ?

The answer to this question is relatively complex in academic circles. However, generally speaking, there are two main categories : ischaemic stroke and haemorrhagic stroke. This distinction is based on the type of blood vessel damage, as discussed earlier. Ischaemic strokes account for the majority of stroke cases (around 80–85 per cent), whilst haemorrhagic strokes account for the minority (around 15–20 per cent). These statistics are mainly drawn from studies carried out in high-income countries (Europe, North America, Australia), whilst the limited data available from low- and middle-income settings suggest a slightly higher proportion of haemorrhagic strokes, roughly 30–40 per cent depending on the source. Whether ischaemic or haemorrhagic, a stroke almost always results in irreversible damage to a portion of the brain or spinal cord. The damaged area is visible on brain imaging (CT or MRI) and its location and size can be precisely described.

- ***Ischaemic stroke***

It results from the blockage of a blood vessel of the nervous system. In the vast majority of cases, this involves the blockage of an artery, a blood vessel carrying blood rich in oxygen, glucose and other nutrients to the brain or spinal cord. The blockage is most often caused by a blood clot that has formed locally or has travelled from another part of the body. However, the blockage can also be caused by plaques of cholesterol, tumours, cancer metastases, air bubbles, fat, or any other type of substance that accidentally enters the bloodstream.

- ***Haemorrhagic stroke***

It results from the rupture or tearing of a blood vessel of the nervous system. In the vast majority of cases, this involves the rupture of an artery of varying size, leading to a more or less profuse flow of blood into the brain, the spinal cord, or the surrounding spaces. This rupture usually occurs because the blood vessels are fragile. This fragility may be the consequence of a disease of the blood vessels that was present at birth or a complication of conditions such as high blood pressure or diabetes.

- ***Transient ischaemic attack (TIA)***

In certain specific cases of ischaemic stroke, the blockage of the artery is only