Cerebral infarction - My experience!

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Abstract

Background: Cerebral infarction is common medical emergency. It is mostly caused by thromboembolic disease secondary to atherosclerosis in major extra cranial arteries. Cerebral venous occlusion, if promptly diagnosed and adequately managed, contains reversible alterations. Hypertension is the most important modifiable risk factor for stroke. Efficacious reduction of blood pressure is essential for stroke prevention, even more so than the choice of antihypertensive drugs. Indications for the use of antihypertensive drugs depend on blood pressure values and vascular risk profile; thus, treatment should be initiated earlier in patients with diabetes mellitus or in those with a high vascular risk profile. Treatment of dyslipidemia with statins, anticoagulation therapy in atrial fibrillation, and carotid endarterectomy in symptomatic high-grade carotid stenosis are also effective for stroke prevention. Lifestyle factors that have been proven to reduce stroke risk include reducing salt, eliminating smoking, performing regular physical activity, and maintaining a normal body weight. Hereby I am sharing my personal experience about disease onset, progress, useful investigations, its medication and role of physiotherapy.

Methods: I had Stroke was in 2009, and here I am sharing my personal experiences about the signs and symptoms, the investigations I had to go through like the blood sample for homocysteine, C.T. scan, M.R.I., D.S.A., USG to reach to the diagnosis, Also the treatment that was given to me in different institutes which I visited because of my condition and how physiotherapy helped me to get back to the normal life.

Conclusion: In my case, what I have believed is that antiplatelets, benzodiazepines and physiotherapy has a major role in treatment of infarct and its consequences.

Keywords: Stroke, antiplatelet, physiotherapy

Introduction

Cerebral venous occlusion is often underdiagnosed. The underlying pathological basis corresponds to various mechanisms due to different anatomical and physiological features of cerebral venous system. Extensive collateral circulation within the cerebral venous system allows for a significant degree of compensation in the early stages of venous occlusion. Elevated cerebral venous pressure due to cerebral venous occlusion can result in a spectrum of phenomena including a dilated venous and capillary bed, development of interstitial edema, increased cerebrospinal fluid production, decreased cerebrospinal fluid absorption and rupture of venous structures (hematoma). All of these pathophysiological changes may explain the clinical observation that cerebral venous occlusion, if promptly diagnosed and adequately managed, contains reversible alterations and need not always lead to venous infarction.

Materials & Methods

The first time I had Stroke was in 2009 when I was working in WHO and doing PPI (pulse polio immunization) monitoring in June 2009 at 4 PM and having a cup of tea and taking briefing from my friends who had gone in different areas of BHAGALPUR. I noticed that I had sense of paresthesia in my right hand and I could not catch my pen and my writing became clumsy. I thought immediately something has happened to me an Infarction or Hemorrhage.

I came back from my office at 6 PM, at that time I did not have weakness in my extremities. Did not consult any Doctor but searched for a CT scan which was only done in Medical College and there too it had gone wrong. I talked to one of my friend who suggested me to go to Delhi.
I went to Delhi and visited PARAS With Dr Suri who examined me and to my surprise my BP was 230/130 and gave for all Investigations and MRI. Before that I was not Hypertensive.

In the Evening I took all my reports and came to know I am Diabetic also; my Lipids were high and MRI revealed Cerebral Infarction in the Internal Capsule. Because I had Aphasia, my mind & my voice could not coordinate, usually what I wanted to say I could not, something else used to come out so people could not understand me and my volume of speech had gone low. Slowly slowly I recovered and it took about an year for my speech and my handwriting. In 2014 all of a sudden when I had returned from Darbhanga where I was an Assistant Professor in Medicine after a tiring journey having missed my medicines because I returned at 2 in the night because of road blockade. I slept and when I woke up I had weakness of my right arm and leg, I again had Aphasia which was more than my first attack. I could not speak and my legs and arms had a feeling of tightness in the affected side which did not allow me to walk for a short distance, my mouth had fullness of saliva which did not allow me to speak. I again went to Delhi and found that I Again had Cerebral Infarction on same side as before. This time they wanted to check that my Clopivias (clopidogrel) was working or I had developed resistance against the drug but after 2 days they said that the drug was absolutely fine. They said to continue the treatment with Aspirin 75 mg.

The same year in December 2014. I again felt like I was having Stroke, my extremities became tight, I had difficulty in walking my arms became tight and did not move with the sensation I could not appreciate. I had difficulty in speaking and I could not speak to my colleagues, I thought now this is serious so moved to NIMHANS, Bangalore where Dr Sanjeev (Associate Professor) in Neurology immediately saw me and admitted in the indoor ward. He took my detail history and put me on Enoxpari and admitted in the indoor ward. He took my detail history and put me on Enoxpari and admitted in the indoor ward.

On the next day they took me to DSA where it was found no thrombotic lesion is there, instead there was narrowing of the arteries which suggested Vasculitis, to which I was sure that It could not be there because what was the reason of Vasculitis only on left side. I told Professor Tally to search for some other reason, so next day they asked for Homocysteine levels. The investigation proved Homocysteinemia and I was treated with Homin tablet (containing B-6 and Pregabalin). And so my life started getting normal from 2014 December till now.

Definition of medical language and its feel
Spasticity: It feels as if the patient is having tightness of extremities and restrict your free movement. Spasticity help you to walk with difficulty but if spasticity is not there the patient will fall down or cannot walk because of flaccidity, so it is boon for hemiplegic patient.

Aphasia: Having difficulty in speaking with breaking of language, people have difficulty in understanding your language

Discussion
Antiplatelet agents produce a small, but worthwhile benefit in long-term functional outcome and survival, and have become standard treatment for acute ischaemic stroke.

Anticoagulants are often used as an alternative treatment, despite evidence that they are ineffective in producing long-term benefits. Treatment with anticoagulants offers no net advantages over antiplatelet agents in patients with acute ischaemic stroke. Ischaemic stroke is caused by a blood-clot blocking the blood supply to an area of the brain. Blood-thinning drugs, such as anticoagulants and antiplatelet agents, can potentially prevent arteries from being blocked, or prevent them re-blocking. They can also prevent clots forming in the deep veins in the leg, which can break off and travel to the lungs. Its my personal experience during the course of my illness that cerebral infarct can be well managed by regular intake of antiplatelets. As a prophylactic measure in the long term it can be well established that Antiplatelets alone are capable of preventing further thrombosis and consequent emboli. What is the role of Anticoagulant when Antiplatelet are being given? I strictly told Dr Tally that when I am taking Antiplatelet and that drug is going to prevent any clot formation then why should I use Anticoagulants. And so, I did not use Anticoagulants till now, though the Aspirin was in 325 mg doses. In winters the Spasticity increase for which Clonazepam 0.5 mg with Pregabalin is a wonderful drug.

Role of Physiotherapy
Physiotherapy improves recovery of function and mobility after stroke. NICE (National Institute for health and Care Excellence) recommends a minimum of 45 minutes of physiotherapy five days a week. High intensity therapy is needed to relearn lost abilities. As far as I think physiotherapy helped me a lot in case of my recovery which I am doing till now and slowly spasticity in extremities is disappearing, the weakness is also comparatively improving, the speech is also improving. I have presented my presentation in APICON 2020 and able to do my routine works like teaching post graduates, under graduates, taking rounds in ward, emergency etc.

Conclusion
Antiplatelets, benzodiazepines and physiotherapy have a major role in treatment of infarct and its consequences. So, this is experience of my life during the last 12 year in recovery of my hemiplegia which I want to share with all my medical friends.

References
4. Lange clinical neurology 10th edition