



## A CASE OF ACUTE ISCHEMIC STROKE WITH P/O NEUROFIBROMATOSIS

**Dr. Hillori  
Vithalani\***

Resident, Department of Pediatrics, Geetanjali Medical College and Hospital, Udaipur \*Corresponding Author

**Dr. Arpit Parashar**

Resident, Department of Pediatrics, Geetanjali Medical College and Hospital, Udaipur

**ABSTRACT**

**Background:** In this pandemic era, we as clinicians are encountering a high number of illnesses and their sequelae ranging from benign illnesses to long term CNS involvement. We report one such treated case of Acute Ischemic Stroke With P/O Neurofibromatosis with positive family history. **Case Description:** An 9 yrs 10 months old male child came to OPD with complain of headache and vomiting with upper limb and lower limb weakness and deviation of mouth towards left side. On examination, the patient was vitally stable and had multiple café au lait macules noted on trunk with positive family history of neurofibromatosis. Investigations were sent as per standard protocol with normal ANCA, ANA and HPLC levels. MRI angio was suggestive of block in Left MCA territory and hyperacute infarct in left temporoparietal region. Patient was started on T. Aspirin and Neuro Paediatric refer was done. Patient's relative was counselled for fundus examination and genetic karyotyping for further work up but they refused. The patient was then discharged on T. Aspirin with advice of follow up in neuro paediatric OPD. **Conclusion:** The prevalence of cerebral arteriopathies in neurofibromas is 6%. The cerebral vessels may develop aneurysms or stenosis. Patient with NF-1 are at higher risk of developing stroke at young age. Because of unpredictable complications associated with NF-1, close follow-up is necessary.

**KEYWORDS :** Neurofibromatosis, Acute Ischemic Stroke, T. Aspirin, Genetic Karyotyping

**INTRODUCTION**

In this pandemic era, we as clinicians are encountering a high number of illnesses and their sequelae ranging from benign illnesses to long term CNS involvement. We report one such treated case of Acute Ischemic Stroke With P/O Neurofibromatosis with positive family history.

**Case Report**

An 9 year 10 months old male child came to OPD with complain of headache and vomiting with upper limb and lower limb weakness and deviation of mouth towards left side. On examination, the patient was vitally stable and had multiple café au lait macules (image 1) noted on trunk with positive family history of neurofibromatosis. Investigations were sent as per standard protocol with normal ANCA, ANA and HPLC levels. MRI angio was suggestive of block in Left MCA territory and hyperacute infarct in left temporoparietal region. Patient was started on T. Aspirin and Neuro Paediatric refer was done. Patient's relative was counselled for fundus examination and genetic karyotyping for further work up but they refused. The patient was then discharged on T. Aspirin with advice of follow up in neuro paediatric OPD.



**Image 1: Café Au Lait Macules**

**DISCUSSION**

Neurofibromatosis type 1 is an autosomal dominant genetic disorder with multisystemic manifestation including vascular abnormalities. In patients with NF1, the prevalence of stroke were elevated when compared with non-NF1 individuals. This was primarily because of a significantly higher incidence of

haemorrhagic stroke subtype (ICH and SAH), whereas the prevalence of ischemic stroke were higher only among children with NF1.

**CONCLUSION**

The prevalence of cerebral arteriopathies in neurofibromas is 6%. The cerebral vessels may develop aneurysms or stenosis. Patient with NF-1 are at higher risk of developing stroke at young age. Because of unpredictable complications associated with NF-1, close follow-up is necessary.

**Acknowledgements**

Authors would like to thank the immense help received from the scholars whose articles are cited and included in references of this manuscript. They are also grateful to authors/editors/publishers of those articles, journals and books from where the literature for this article has been reviewed and discussed.

**Funding:** No funding sources

**Conflict of Interest:** None declared

**Ethical Approval:** NA

**Patient Consent:** Verbal Consent taken

**REFERENCES**

1. Nicole Ullrich, Neurofibromatosis in In Kliegman RM, St Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM. Nelson Textbook of Pediatrics. 21<sup>st</sup> ed.- Vol 2. New Delhi: Elsevier; 2020. P3141.
2. Nomazulu Dlamini and Gabrielle A. deVeber, Pediatric Stroke in In Kliegman RM, St Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM. Nelson Textbook of Pediatrics. 21<sup>st</sup> ed.- Vol 2. New Delhi: Elsevier; 2020. P3209
3. Neurofibromatosis type 1 and its relationship with stroke Alison E. Arch, MD Terry AR, Jordan JT, Schwamm L, and Plotkin SR. Increased Risk of Cerebrovascular Disease Among Patients With Neurofibromatosis Type 1: Population-Based Approach. Stroke. 2016.
4. Krishnaswami V, Gilmore J, Vahidassr D Young stroke due to vascular anomaly from neurofibromatosis type 1 Case Reports 2012;2012:BCR2012 006258.