When MS doesn't give another chance About three Moroccan patients with highly aggressive MS

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Introduction: Multiple sclerosis (MS) is a demyelinating disease that attacks specifically the central nervous system. The prevalence around the world knows a heterogenous distribution with a high prevalence in Europe and North America. In Africa, the prevalence is more likely to be important in North Africa and less important in Sub-Saharian Africa. We report three observations about Moroccan patients with a highly aggressive progressive MS and discuss risk factors in each patient and in our population.

Observation: We described three primary progressive MS cases, whose clinical and imaging features are typical of highly aggressive course for this pathology. At MRI brain scan, patients had a very important lesion burden. Atrophy was variable but more remarkable in a patient who lost most of her neural capital. This patient, at the age of 34 have lost her intellectual capacities and autonomy. There was no radiological activity in all cases. EDSS was at 4.5, 6 and 7 in 6, 2 and 7 years of evolution. One patient only was positive for oligoclonal bands in cerebrospinal fluid. Serum Vitamin D was low in all patients. Treatment in these patients is a challenge due to the absence of drugs adapted to this form of MS. We offered methylprednisolone boluses in all patients with variable responses.

Conclusion: Aggressive primary progressive MS is a real diagnostic and therapeutic challenge. Our patients had different presentation forms but all of them quickly climbed their EDSS in a short time. There are several risk factors in Africa and the first one is being of non-white race. Vitamin D deficiency, Genetic factors and poor-quality diet are other risk factors that we discussed through those observations.