Treatment considerations for psychological and physiological problems in patients with Dyke-Davidoff-Masson syndrome in a pediatric population: A review

Jiali Lau1 and Tang Xuan Li2
1National University Hospital, Singapore
2University of Tasmania, Australia

Statement of the problem: Dyke-Davidoff-Masson syndrome is a rare clinical condition with characteristic clinical and radiological findings. First described in 1933 by Dyke, Davidoff and Masson, literature on this condition has been scant with the prevalence of this syndrome still unknown with a number of these reports being the first published cases in their respective countries. The classical clinical presentation includes intellectual disability with challenging behavior, recurrent seizures, contralateral hemiplegia or hemiparesis and facial asymmetry. We aim to review the treatment options for the various psychological and physiological issues that patients of this rare condition face.

Orientation: A literature search was conducted via several databases such as PubMed.

Findings: Based on our review of the existing literature, management strategies differ for each patient with priorities depending upon the key clinical features present. Antipsychotic medications such as Risperidone may be effective for reducing challenging behavior in the short-term, however in the longer term there is a risk of significant side effects. The management of the seizures, if present should be a priority which often necessitates the use of multiple antiepileptic medications. Some cases have demonstrated the effectiveness of hemispherectomy for adults with intractable unihemispheric epilepsy resulting in excellent long term seizure control. Management of the hemiparesis or hemiplegia depends on the severity of the disability with physiotherapy sessions and the use of orthotics useful in these instances. The involvement of allied health professionals such as physiotherapists and psychologists is desirable for the long term management of patients with Dyke-Davidoff-Mason syndrome. The prognosis for Dyke-Davidoff-Mason syndrome is better if the onset of hemiparesis is after two years of age and in absence of prolonged or recurrent seizure.

Conclusion: A multidisciplinary approach with the involvement of various specialties is advocated given the multifaceted issues faced by these patients.

Biography
Jiali Lau is a Medical Officer with MOH holdings, Singapore. She was graduated from the National University of Malaysia and is currently working in Department of Neonatology, National University Hospital, Singapore. She is actively involved in research and clinical work. She has clinical experience in the field of general pediatrics, pediatric emergency medicine and neonatology and pediatric surgery. Her clinical interests include adolescent medicine and neonatology. She has presented at international conferences as the lead oral presenter in the field of adolescent medicine with special interests in eating disorders. She is actively involved in ongoing clinical research in the field of general pediatrics and adolescent medicine.

jiali.lau@mohh.com.sg