Brachial plexus injury management in India: a lesson to be learnt

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Abstract
Brachial Plexus Injury (BPI) is a devastating injury that alters the lives of many. The history of BPI dates back to the time of Hippocrates. Interestingly, there was a time during the period of militaristic Sparta, when babies with obstetric injuries were thrown alive into the gorge to get rid of the impurities. A proper rehabilitation department which will help to rehabilitate the patients especially those with global palsy of long duration so that they can lead a much respectable life in the society. With all these measures we also require a proper referral system so that the patient can be referred early to the person or the institute specialising in treating the BPI. No patient should be sent back without offering the proper surgical treatment.
INTRODUCTION

Brachial Plexus Injury (BPI) is a devastating injury that alters the lives of many. The history of BPI dates back to the time of Hippocrates. Interestingly, there was a time during the period of militaristic Sparta, when babies with obstetric injuries were thrown alive into the gorge to get rid of the impurities [1]. Brachial plexus surgery was not rewarding till the 1970s. One of the earliest descriptions of injuries was evident from Homer's Iliad also [2]. The first known documentation of obstetric brachial plexus injury was provided by Smellie in 1764, [3] and Duchenne in 1872 [4] explained that traction was the cause of the palsy. Erb described similar palsy in adults in 1874 [5]. Thorburn was the first to publish an article about direct repair in 1900 [6]. Millesi (Vienna) and Narakas (Laussane) popularised the surgery for brachial plexus reconstruction in the 1970s by [7,8]

For the last three decades, there have been many advancements in the management of the BPI across the world. Similarly, the surgical management of BPI has improved over the period in India too. Though many specialties are taking care of these patients in India. But, Plastic surgery, Neurosurgery and hand surgery are the primary specialities involved in surgical management. Hand surgeons are primarily orthopaedic and plastic surgeons having specific training in hand surgeries. Unfortunately, there aren’t many training institutes in India imparting training in BPI management. Consequently, residents remain unexposed to this type of injury leading to failure in timely diagnosis and treatment of BPI. Since there is not much exposure, residents fail to develop an interest in this type of nerve injury and will not consider it as a career option. Moreover, most plastic surgeons are opting for more lucrative options like aesthetic surgery once their residency finishes. As most of the patients belong to the young age group having a history of injury secondary to road traffic accidents in the majority of cases, plastic surgeons carry an immense responsibility on their shoulders to timely diagnose and treat those patients. As the majority of the patients of BPI are used to be the sole bread earner of their family and belong to low socio-economic strata, BPI makes the lives of their family miserable. To add to this, very few tertiary care institutes offering complete treatment result in long waiting queues of the patients that make the prognosis of the injury worse.

Timely measures are to be taken which is a must if we want to improve the current status in the management of BPI in India. Firstly, proper training of the residents specific to the BPI holds the key if an institute intends to grow as a center offering the BPI treatment. More and more microsurgery labs are to be build up at various tertiary care centres wherein training programs may be offered that includes microsurgical suturing of various peripheral nerves. Secondly, the development of imaging modalities at the centers offering the treatment with experienced radiologists well acquainted with BPI. Thirdly, a fully functional and enthusiastic physiotherapy department plays a vital role whether in a pre-operative or post-operative setting. Finally, a proper rehabilitation department will help to rehabilitate the patients especially with global palsy of long duration so that they can lead a much respectable life in the society. With all these measures we also require a proper referral system so that the patient can be referred early to the person or the institute specializing in treating the BPI. No patient should be sent back without offering the proper surgical treatment.

References:

3. Smellie W. A.: Collection of preternatural cases and observations in midwifery: by william smellie, md completing the design of illustrating his first volume, on that subject. Vol. III. T. and J. Whitehouse at their State Lottery Office, the centre of the east side of Parliament-street; 1765.