



## Editorial

## Thoracic outlet syndrome: Flexible approach to patient-centred education.

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Thoracic outlet syndrome (TOS) is a disorder caused by compression of the brachial plexus and/or the subclavian vessels in the thoracic outlet region. TOS classifications are based on the pathophysiology of symptoms with subgroups consisting of neurogenic (nTOS), venous (vTOS), and arterial (aTOS) [1]. nTOS is the most common presentation described more than 95% of cases. TOS may include several sensorial and vasomotor disorders of the upper extremity [2]. Wide range of nonsurgical treatments are available for TOS. However, surgery is still indicated in some carefully selected cases of severe TOS. In all the cases, treatment plan must be implemented according to the etiology and associated complications. The management directed by TOS familiarized physician is a predictor of better prognosis [3]. TOS conservative management remains non-consensual and mainly based on specific rehabilitation associated to pharmacologic therapies. However, the past few years of practice demonstrated the crucial contribution of patient education in the healthcare delivery. Patient-centered education for effective daily selfmanagement might be an essential component in the TOS treatment plan [4]. Patient and their relatives education was mandated as part of the health care systems by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) since early nineties. However, the one-to-one verbal education model adopted initially was not contributive to the enhancement of services quality specially for long term patient follow-ups. Written informative educational tools remained insufficient to establish shared decision-making model [5]. The involvement of digitalized education modalities such as smartphone applications, videos, web-based content, or virtual reality is increasingly embraced in patient education in many clinical disciplines. Several randomized trials demonstrated a significant increase in patient perception for procedure and follow up benefits as well as a decrease in the related stress. This could improve the patient discipline and quality of life during the treatment plan [6]. Teaching patients via digitalized content is nowadays feasible since patients increasingly possess their personal computers and smartphones. The limits of this delivery mode are the absence of consensual educational materials, the lack of availability in busy clinics and difficult disclosure of ethical considerations. Video-based education seems to be less effective than interactive content and smartphones applications. The web-based education is always a flexible non-stressful environment for patients with low literacy skills in which they can deal with the disease in its epidemiologic, ethiopathogenic and therapeutic aspects. An application with simplified video-based TOS description, personalized prescription and a detailed rehabilitation schedule with tutorials for basic self-management skills would transform the prognosis of this entity.

## References

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