

55. Jahrestagung der Deutschen Gesellschaft für Angiologie – Gesellschaft für Gefäßmedizin e.V. | 10. DGA-Interventionskongress - DGA 2026

Thema:	Gefäßchirurgie
Präsentationsart:	Freier Vortrag (klinisch-praktisch)
Abstract-Nr.:	A-155
Status:	eingereicht
Young Investigator Award	Nein, danke.

The so-called Nutcracker Syndrome- local and remote symptoms properly diagnosed and treated not by diameter or pressure evaluation but sonographic tissue perfusion measurement

T. Scholbach

Praxis für funktionelle Ultraschall Diagnostik, Leipzig, Deutschland

Background

The so-called Nutcracker Syndrome (NCS) is perplexing only for those who focus on the close-up view of the classical approach: diameter reduction + pressure gradient + local symptoms. This narrow perspective but isn't adequate for a problem that sits like a spider in a network of systematically evolving vascular compressions that are caused by external pressure produced by an increasing lordosis pushing against a low hanging abdominal wall as a consequence of a flat thorax and wide or shallow iliac wings. Collaterals to the pelvis with impact on genitals, legs, pelvic nerves, bladder urethra and rectum but also the spine and thus affecting the brain and the development of the whole spectrum of sequentially developing vascular compressions on left and right common iliac veins, inferior vena cava, celiac trunk, superior mesenteric vein, subclavian and internal jugular veins create a multifaceted but typical pattern of symptoms. They can be understood only by measuring the blood flow volumes of the affected vessels and by tissue perfusion measurement of both kidneys. They are crucial as they handle the largest flow volumes below the diaphragm and the NCS can massively affect their drainage routes. Cerebral congestion requires a 4D-PIXELFLUX evaluation of all brain supplying and draining routes including the epidural plexus. With this systematic approach all symptoms of the intertwined affected vessels are understood and properly treated.

Patients and methods

The experience of functional quantitative color Doppler ultrasound examinations in thousands of patients from 36 years is summarized in this talk.

Methods:

- thorough medical history supported by a questionnaire
- diameter and sonographic pressure measurement
- blood flow volume measurement
- tissue perfusion measurement
- 4D-PIXELFLUX volume flow measurements
- change of body posture to repeat measurements
- postprandial repeat of measurements

Results

Successful non-invasive or surgical treatment.

Conclusions

NCS is not an isolated disorder or merely a meaningless anatomical variant. It is comparable to a dam break flooding the entire venous system. Since mainly women are affected due to their propensity of loose connective tissue including higher rates of Ehlers-Danlos Syndrome subsequently increasing spinal curvature and shallow thorax it is a central topic of gender medicine and its understanding an important contribution to a fair treatment of women. The wide-spanned spectrum of their complaints in NCS is often ridiculized , neglected and misunderstood. Stigmatization , psychologization and harmful misguided treatments as embolizations and stenting increase their suffering.< div >It requires training in sophisticated ultrasound techniques and dedication to the gender specific aspects of NCS.< div >

Autorenschaft

Erst-Autor:in:	Thomas Scholbach
Präsentiert von:	Thomas Scholbach
Eingereicht von:	Thomas Scholbach