Premonitory urges reconsidered: urge location corresponds to tic location in patients with primary tic disorders

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Background

Tics are typically preceded by a premonitory urge (PU). However, only few studies investigated PU location and frequency in detail. Leckman et al. (1993)1 used in their landmark study on PU location a full body scheme, where patients should mark PU locations for a small number (n=8) of “most common tics”. They found that – contrary to clinical experience – PUs are not located in the same anatomic region as the corresponding tics.

Research questions

➢ Are tics and the corresponding PUs located in the same anatomic region?
➢ Do PUs depend on specific characteristics of tics?
➢ How are PUs distributed over the body?
➢ Can PU distribution reported by Leckman et al. (1993)1 be replicated?

Methods

• Utilization of an online survey using the platform SoSci Survey
  • Only self-assessments could be used
  • Data were evaluated descriptively using SPSS software
• Usage of modified body scheme of Leckman et al. 1993:
  • Participants could precisely mark PU location
  • PU location was inquired for each tic the participant experienced

Results on PU Distribution

Results on PU Occurrence

• N=291 adult patients were included
• 75.9% indicated that they experience PUs in general
• 97% of the participants reporting tic-specific PUs indicated a momentary relief after the PU for at least one of their tics
• Complex (motor and vocal) tics were more often preceded by a PU compared to simple (motor and vocal) tics with no difference between motor and vocal tics
• PUs were more frequently experienced at the front than on the back side of the body with no difference between right and left side of the body

Fig 2: Density of all motor tics and preceding premonitory urges (PU) by body part.

Fig 3: Density of premonitory urge (PU) of all 20 vocal tics investigated.

Conclusions

• PUs are a core symptom of tic disorders and correspond to the tic location
• Future treatment strategies should focus on improvement of PUs in addition to tic reduction

Literature