

A046 HSCI

A systematic review of literature: The reported efficacy of available treatment interventions for Pediatric Daytime Urinary Incontinence - with a focus on Giggle Incontinence

Abstract

BACKGROUND: Giggle incontinence (GI) is a relatively rare and unique form of daytime urinary incontinence (DUI) seen most often in pediatric patients. GI, unlike other incontinence related pathologies, is only triggered in response to laughter and results in a complete and uncontrolled emptying of the bladder. Due to the complex nature of the condition, the etiology is not fully understood, which has hindered the establishment of a gold standard of treatment. Current research has focused on three physiological components that take place during laughter, with each component being treated with a different intervention. The reported efficacy of these treatments, however, have been conflicting, regardless of type.

PURPOSE: The aim of this study was to evaluate the efficacy of DUI/GI treatment interventions for reducing UI episodes in children/adolescents. Possible links between GI, cataplexy, and laughter, are also discussed.

METHODS: A literature review was conducted using the keywords listed below. Twenty-seven studies met the inclusion criteria and were included in our review.

FINDINGS: Study findings varied for the effectiveness of treatment interventions for DUI, including GI. Consequently, the results produced a wide range of outcomes, from no response to complete response, regardless of intervention.

DISCUSSION: Standard urotherapy (StU) is widely regarded as the first-line intervention for DUI but is not always effective. Other interventions, such as pharmacotherapy or neuromodulation, are subsequently added to the treatment for these refractory patients. These interventions, however, are associated with an increased risk to patients, without providing increased results. Therefore, a monotherapy of StU should be the primary intervention approach for these patients. Importantly, several limitations and challenges were cited by authors, such as: small sample sizes, lack of a control group, short follow-up times, subjective and heterogeneous outcome measures, among others.

KEYWORDS: giggle incontinence; daytime urinary incontinence; enuresis risoria; urotherapy, pharmacotherapy; neuromodulation