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Immediate and delayed effects of atmospheric temperature in the incidence of testicular torsion

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KEYWORDS
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Summary *Introduction:* Ongoing controversy surrounds the role of atmospheric temperature in the incidence of intravaginal testicular torsion (iTT). This debate may be attributed to inadequate research methodology. As environmental risk factors have been successfully investigated with distributed lag non-linear model regression (DLNM), we applied this methodology to investigate the association between daily mean atmospheric temperatures (Tmean) and daily incidences of intravaginal testicular torsion (iTT) in our region.
Study design: We analyzed time series consisting of the daily incidences of surgically confirmed iTT according to Tmean, in a circumscribed region in central Brazil from 2012 to 2015, with non-parametric tests, unadjusted and seasonally and long-term trend adjusted time series regression, as well as with DLNM.
Results: We recovered 218 cases of iTT in 1,125 days of study. Most patients were teenagers (median 15.8 years, interquartile range 14.1-18.5 years). Within the 188