Omalizumab in children and adolescents with chronic urticaria: A 16 week real-world study

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Abstract

Background: The efficacy and safety of omalizumab in adult patients with refractory chronic urticaria (CU) is well established, but there is little information on the treatment of children. Here, we assessed the efficacy, time to onset of effects, improvement of quality of life, and safety of omalizumab in children and adolescents with CU. Methods: Patients aged < 18 years with antihistamine-resistant CU were treated with 150 or 300 mg of omalizumab every four weeks. We used the recently validated Chinese version of urticaria control test (UCT) to assess disease control status, children's dermatology life quality index (CDLQI) to evaluate quality of life impairment, and monitored adverse events to assess the safety. Results: We treated 12 CU patients (7 female, mean age 10.2 ± 4.4 years, range 3–16) with omalizumab. Two thirds (67%) of the patients achieved well-controlled CU (defined as a UCT score [?] 12) after the first administration. The UCT score significantly increased from 2.5 (0.0-5.8) at baseline to 12.0 (1.3-13.8) after four weeks (Z=-3.063, P=0.002) and 15.0 (13.5-16.0) after 16 weeks (Z=-3.065, P=0.002). The CDLQI score decreased from 17.5 (14.5-20.5) at baseline to 9.0 (3.0-13.8) after four weeks (Z=-2.984, P=0.003) and 2.0 (0.0-6.8) after 16 weeks (Z=-3.063, P=0.002). No adverse events were observed. Conclusion: Omalizumab is effective, fast acting and safe for children and adolescents with antihistamine-resistant chronic urticaria.

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