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P141 A RETROSPECTIVE AUDIT OF CHRONIC URTICARIA IN THE IRISH PAEDIATRIC POPULATION

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Background Non-allergic Chronic Urticaria (CU), which includes both Chronic Spontaneous Urticaria (CSU) and Chronic Inducible Urticaria (CIU), is a condition characterised by wheals, erythema and pruritus. It is often associated with angioedema. CSU/CIU are often misinterpreted as an allergic condition by both families and healthcare professionals leading to unnecessary investigations, unwarranted therapeutics, and a high referral burden on paediatric allergy specialists. The aim of this study was to define the demographics of cases of chronic urticaria referred to an Irish allergy clinic and to explore diagnostic and treatment patterns at a primary care level. Finally, this study aimed to determine the specialist management strategy as compared to the current British Society for Allergy and Clinical Immunology (BSACI) guidelines.

Methods A retrospective audit of medical records of all children seen by the Allergy service at Our Lady's Children's Hospital Crumlin (OLCHC) with a diagnosis of Chronic Spontaneous Urticaria or Chronic Inducible Urticaria between January 2014 - December 2017 was conducted.

Results A total of 97 children were included. Both genders were equally affected (Males n=48) and the most common age of onset of CU was <5 years (n=44). Of the 97 children reviewed, the majority (71%) presented through primary care referral (n=69). At the primary care level, only 10% of children (n=10) were appropriately diagnosed with CU. The most common pre-referral misdiagnosis was allergy (n=32), followed by no diagnosis (n=12). While 65% of children (n=63) were started on an antihistamine, only 32% (n=28) received a second-generation H₁ antihistamine by the primary care provider. Five cases inappropriately were prescribed oral or topical corticosteroids. Once reviewed by the specialist allergy service at OLCHC, 100% of the children were prescribed second-generation H₁ antihistamines, primarily cetirizine (n=64), and no children were treated with corticosteroids. Following the first allergy consult, 70% of children saw resolution of symptoms and were discharged (n=67).

Conclusion This audit demonstrates that recognition and appropriate treatment of Chronic Spontaneous and Chronic Inducible Urticaria are key targets for primary care education in order to achieve prompt resolution of symptoms and reduced referral burden on specialist services.

P142 EFFECTIVENESS AND RELIABILITY OF PRE-DISCHARGE JAUNDICE ASSESSMENT TOOLS: A QUALITY IMPROVEMENT PROJECT

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Background Visual inspection using the Kramer index was the only tool available to detect the degree of jaundice at our hospital. A retrospective audit done at this hospital showed that only 13% of neonates required phototherapy and 87% were pricked unnecessarily, adding to parental anxiety. Therefore, we decided to launch a one-year prospective study (July 2016–2017).

Aim To determine the diagnostic accuracy of two pre-discharge jaundice assessment tools and to correlate these measurements with SBR results in neonates >35 weeks in order to implement a safe, cost-effective & patient friendly alternative to improve quality of care.

Method All health care professionals were briefed on the guidelines set out in NICE⁴ & AAP¹ for visual assessment of jaundice. In the first 6 months, any neonate being visually assessed as significantly jaundiced (below nipple line) was referred for SBR intake. Results were then plotted on nomograms for further action.^{1,3,4}

During the next six months, a TcB was purchased and all health care professionals were briefed on equipment usage and criteria for further action.^{1,3,4} A pre-discharge TcB check was performed on all neonates. SBR was taken within an hour of TcB if it measured >200 μmol/l in term & >170 μmol/l in late pre-term neonates.^{1,3,4} Further follow up was arranged as per risk designation on nomogram (Recommendation 3.0, 6.12, AAP).

The correlation of the above variables was analysed. Reliability of TcB was then determined in both terms and pre-terms.

Inclusion criteria: Age: <14 days, >38 weeks & >24 hours of age, between 35–37 + 6 weeks & >48 hours of age.^{1,3,4}

Exclusion criteria: <35 weeks gestation, risk factors as listed in AAP (Figure 3).^{1,3,4}

Results

Abstract P142 Table 1

	First six months (Visual assessment)	Second six months (Transcutaneous Billinometer)
Sample size	842	820
Referred for SBR	123	41
Phototherapy	13	10
Re-admission	5	0

Reliability of TcB: Sample size: 72

Average difference: Term $\pm 22 \mu\text{mol/l}$, Pre-term $\pm 29 \mu\text{mol/l}$

Conclusion Visual estimation of bilirubin levels for the degree of jaundice can lead to errors with 70% sensitivity and 89% specificity. TcB, however, is a non-invasive, cost effective and reliable alternative tool with 100% sensitivity and 96% specificity. TcB >200 μmol/l in term and >170 μmol/l in late pre-terms is