

and the malabsorption of nutrients. Our aim was to investigate the impact of exclusive enteral nutrition (EEN) on the nutritional status in a cohort of paediatric CD patients.

Methods: CD newly diagnosed patients were prospectively enrolled. At the time of diagnosis (T0), after induction therapy at 8 weeks (T8) and after 24 (T24) weeks from the diagnosis, a complete physical evaluation was performed together with blood vitamins measurements. The assessment of the fatty free mass (FFM) and the resting energy expenditure (REE) was measured through the use of bioelectrical impedance (BIA). Moreover at T0 and at T24 a dual-energy X-ray (DXA) was performed to assess patients' bone mineral density (BMD). Student's *t* test or a linear regression analysis were performed when needed.

Results: Eighteen consecutive CD paediatric patients were enrolled in the study. The median age at diagnosis was 13 years (range: 8–16). Fourteen out of 18 were male (77.8%). All patients started EEN as remission induction therapy. At both time points, and even more significantly at T24, there was a reduction of the activity score of disease ($p < 0.001$) and of some main inflammation parameters studied such as the erythrocyte sedimentation rate and platelet count ($p = 0.002$ and $p < 0.001$). There was also an improvement of the *z*-score for the weight and body mass index (BMI) ($p < 0.001$ and $p < 0.001$) and the tricipital plica measurement ($p = 0.002$). At the BIA analysis there was a significant increase of FFM ($p < 0.001$) and of REE ($p = 0.002$) compared with T0. Moreover, between T0 and T8 there was an improvement of 25OH vitamin D ($p = 0.03$), vitamin A ($p = 0.003$), E ($p = 0.05$), and folate ($p = 0.05$) levels. In addition, between T8 and T24 there was also a growth speed rate increase ($p = 0.02$). BMD values were increased between T0 and T24, but not significantly. At T0, T8 and T24, FFM was directly related to patients' weight, height, and REE ($p < 0.001$). Moreover, at T0 and T24, FFM was also directly correlated to BMD ($p = 0.01$ and 0.007).

Conclusions: EEN improves the nutritional status in CD children for a sustained period by increasing serum vitamin levels and restoring the patient physical state through an increase of weight, BMI, growth speed and tricipital plica measures. EEN also enhance the FFM and REE, leading to the improvement of the basal metabolism rate. Moreover, in our cohort of patients, the FFM is also directly related to BMD. Even if further studies are needed, our data suggest that FFM could represent a potential safer and indirect measure of children bone metabolism.

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Validation of the Quantum Blue[®] infliximab-level rapid test in clinical practice of patients with inflammatory bowel disease

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Background: Sub therapeutic serum drug levels of infliximab (IFX) are associated with poor clinical and endoscopic outcome in patients with inflammatory bowel disease (IBD). To make proactive dose adjustments to optimise IFX therapy, quick results of serum drug level measurements are essential. Since results of the conventional bridging enzyme-linked immunosorbent assay (ELISA) are usually only available after a number of days due to

the time-consuming character of the test, shipment of samples to external laboratories and administrative hurdles, there is a need for rapid 'point-of-care' assays in treatment with monoclonal antibodies. Most evidence about the validation of the rapid test is derived from spiking experiments. This abstract presents the results of the validation of the Quantum Blue[®] IFX rapid test in routine care of IBD patients by comparing it with two different validated ELISAs.

Methods: Serum samples for IFX measurements were prospectively obtained from IBD patients on IFX maintenance treatment after obtaining written consent. Samples were measured with the Quantum Blue[®] Infliximab rapid test (BÜHLMANN Laboratories, Schönenbuch, Switzerland), Sanquin ELISA (Sanquin laboratories, Amsterdam, the Netherlands) and RIDASCREEN[®] IFX ELISA monitoring kit (R-Biopharm, Darmstadt, Germany). Trough levels were measured just before infusion and mid-infusion levels during outpatient clinic visits for routine consultations (Weeks 3–5). Results of the two ELISA methods were compared with results obtained with the Quantum Blue[®] Infliximab rapid test.

Results: Thirty samples of IBD patients on IFX maintenance treatment were prospectively collected. The majority of the samples were taken at trough (83%) and 5 at mid-infusion. Three out of five mid-infusion level measurements exceeded the upper limit of the rapid test (20 µg/ml) and were excluded from the correlation. When comparing the Quantum Blue[®] Infliximab rapid test with the Sanquin ELISA and the RIDASCREEN[®] IFX ELISA, a correlation coefficient of 0.876 and 0.867 was found, respectively. The intraclass correlation coefficient (ICC) of the Quantum Blue[®] Infliximab rapid test vs. the Sanquin ELISA was 0.729 (95% CI -0.31 to 0.91). After comparison of the rapid test with the RIDASCREEN[®] IFX ELISA, an ICC of 0.824 (95% CI 0.240–0.940) was found.

Conclusions: The Quantum Blue[®] Infliximab rapid test is a good alternative for the time-consuming conventional ELISA method for the measurement of IFX serum concentrations at trough in IBD patients receiving IFX maintenance treatment. This test can be used in routine care since results are available within 15 min which allows physicians to make proactive adjustments in dosing.

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Risk of post-operative complications among Crohn's disease patients treated pre-operatively with vedolizumab. A matched case-control study

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Background: Although biologic agents have revolutionised the medical management of moderate-to-severe Crohn's disease (CD), many patients still require surgery. Vedolizumab, a biologic agent directed towards gut-specific $\alpha 4\beta 7$ integrins, has recently been used to treat CD. There is considerable controversy regarding the potential adverse effects of vedolizumab on surgical outcomes. The aim of this study was to evaluate 30-day post-operative morbidity in patients with CD receiving vedolizumab prior to colorectal surgery.

Methods: A prospectively maintained database evaluating the role of clinical, serologic and genetic markers with clinical phenotypes