Table 1. Physical examination and laboratory findings. (for abstract P3-1231)

Laboratory findings	Our patient initial values	After high dose oral glucucorticoid and antihistaminic therapy values	Postoperative values
Physical examination	Height: 137.3 cm (HSDS: −1.3) Weight: 29.5 (BMI: 15.7) Heart rate: 125/min Goiter and tremor		Height: 139 cm (HSDS: −1,2) Weight: 31 (BMI: 16.06) Heart rate: 75/min
fT_3	36.31 pmol/l (3.8–6 pmol/l)	6,02 pmol/L	3,8 pmol/L
FT_4	71.5 pmol/l (7–16 pmol/l)	21.96 pmol/l	15.36 pmol/l
TSH	0.02 mcIU/ml (0.34–5.6 mcIU/ml)		
TRAb	405 U/l (0–9 U/l)		
Thyroglobulin Ab	311.1 IU/ml (negative)		
TPO Ab	221.4 IU/ml (negative)		
Hemogram	Hemoglobin:14,5 g/dl Leucocyte: 7400/mm^3 Platelet: 319 000/mm^3		Hemoglobin: 14.6 g/dl Leucocyte: 23 200/mm^3 Platelet: 277 000/mm^3
Liver functions	AST: 18 U/l (<41) ALT: 17 U/l (<34)		
Thyroid Color Doppler Ultrasonography	Thyroid volume: 14.1 ml (> +2 S.D.) Parenchyma in heterogeneous appearance, increased thyroid blood flow	Thyroid volume: 12.36 ml (> +2 S.D.) Parenchyma in heterogeneous appearance	
Thyroid Scintigraphy	Thyroid uptake above the normal limit (4^{th} h: 62.4%; 24^{th} h 54.6%)		

P3-1232

Malabsorption of Levothyroxine in a Child Affected by Short Bowel Syndrome

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Background: Hypothyroidism is a common problem during childhood generally due to autoimmune thyroid disease. It can also occur in case of severe loss of serum proteins, as well as in the case presented. The most accepted practice in the treatment of hypothyroidism consists in the oral administration of LT_4. Many conditions may affect the absorption of LT_4. **Case presentation:** We report an original case of LT_4 malabsorption in a 6-years old child affected by congenital multiple jejunal atresias. He presented TSH 30 μUI/ml (0.6–6.3) and fT_4 0.71 ng/dl (0.7–1.8), TGAb 34.5 U/ml (0–40) and TPOAb 20.8 U/ml (0–60), so we started LT_4 tablet 25 μg/day (2.5 μg/kg per day). The US showed a normal gland. After 1 month of treatment, TSH was 80 μUI/ml and fT_4 0.7 ng/dl, consequently the dosage was increased to 25 μg 5 days per week and 50 μg twice (4 μg/kg per day). Although the dosage was high, after one month TSH increased >150 μUI/ml and fT_4 was 0.2 ng/dl. Poor compliance could be ruled out. A severe malabsorption of oral LT_4 was hypothesized. The LT_4 oral solution, available in Italy, has a more rapid absorption than tablets in studies done in adult populations and this characteristics would have been an advantage in our patient, so we decided to switch to the treatment with LT_4 oral solution at the same dosage. After 4–6 months of treatment with LT_4 oral solution the values of TSH and fT_4 were within the normal range. **Conclusion:** Short bowel syndrome is the most common cause of intestinal failure in children and causes altered absorption of many drugs. In this case we observed how the TSH value decreased only after the switch from the LT_4 tablets to the LT_4 oral solution. The most important advantage of LT_4 oral solution consists of a faster absorption, which is very crucial in a population of patients having a limited absorption of drugs. We can certainly highlight the implications of the liquid formulation of LT_4, a novel and useful formulation in cases where the absorption of drugs is clearly hindered.

P3-1233

Growth Curves for Turkish Girls with Turner Syndrome: Results of the Turkish Turner Syndrome Study Group

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Background: Children with Turner syndrome (TS) have a specific growth pattern that is quite different from that of healthy children. Many countries have population specific growth charts for TS. **Objective and hypotheses:** Considering national and ethnic differences, we undertook this multicentered collaborative study to construct growth charts and reference values for height, weight, and BMI from birth to adulthood for spontaneous growth of Turkish girls with TS. **Method:** Cross-sectional height and weight data of 842 patients with TS, younger than 18 years of age and before starting any therapy were evaluated. Data were processed to calculate 3th, 10th, 25th, 50th, 75th, 90th, and 97th percentile values for defined ages and to construct growth curves for height for age, weight-for-age and BMI-for-age for girls with TS. **Results:** The growth pattern of TS girls in this series resembled the growth pattern of TS girls in other reports but there were differences in height between our series and the others. Mean birth length values were shorter than that of the normal population and deteriorated by age. While height was under −2 S.D. at 3–4 years of age, it gradually worsened and reached approximately −4 S.D. at about 12 years of age with lack of pubertal peak. The increase in BMI in TS girls especially between 2 and 6 years of age was noteworthy. **Conclusion:** This study provide disease-specific growth charts for Turkish girls with TS. These disease specific national growth charts will improve the evaluation and management of growth promoting therapeutic agents in TS.

P3-1234

Cardiovascular Assessment in Turner Syndrome: Current Practice in the United Kingdom

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Background: In 2007, the Turner syndrome (TS) Consensus Study Group developed an international guideline for clinical care of girls and women with TS. Given emerging concerns of long term cardiovascular complications, the consensus recommends that cardiac MRI should be performed when girls are old enough to tolerate the procedure or at the time of transition and to be repeated at least every 5–10 years. **Method:** We conducted a survey of cardiovascular (CVS) assessment in girls and women with TS in all tertiary paediatric endocrinology centres and all adult centres with dedicated TS clinical service in the UK. **Results:** An online survey was sent to 49 consultants (20 paediatric, 29 adult). There were 26/49 (53%) responders.13/26 (50%) provided care in childhood. At diagnosis of TS, echo (9/12,75%) or echo & MRI (3/12,25%) were performed. In adolescence, echo (6/13, 46%) or MRI (3/13, 23%) were performed for CVS re-evaluation. However, 4/13 (31%) were not re-evaluated in paediatric care. Median age of re-evaluation was 16 years (range 10–16) or at the time of transition. In adulthood, echo & MRI (10/13, 77%), MRI (2/13, 15%) and echo (1/13) were performed respectively at frequency of 5 years or less. Aortic sized index was provided in imaging reports of 5/10 (50%) and 13/13 of paediatric and adult responders respectively. Blood pressure was measured in the paediatric clinic: annually 3/12 (25%), 6 monthly 6/12 (50%) and 3–4 monthly 3/12 (25%), whereas this was measured in the adult clinic: annually 10/13 (77%), 6 monthly 2/13 (15%) and at every clinic 1/13. Cardiovascular risk is discussed by the primary treating paediatrician in 7/11 (64%) and by the primary treating adult physician in 12/13 (92%). Written information on cardiovascular risks is provided in 3/10 (30%) and 2/12 (17%) of paediatric and adult clinics respectively. In high risk patients, a recommendation to carry medical bracelet/card is provided by 2/10 (20%) and 2/12 (17%) of paediatric and adult clinics respectively. **Conclusion:** Despite the existing consensus, this survey, of clinicians providing care to individuals with TS in the UK, demonstrates wide variation in cardiovascular assessment especially in adolescence. This variability may relate to access to local expertise and specialist investigations. Uncertainties surrounding the value of investigations to clinical outcome of aortic dissection especially in childhood may also be a factor.

P3-1235

Turner Syndrome in Iceland 1968–2012: Congenital Anomalies and Clinical Outcomes

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Background: In 1968 a cytogenetics laboratory was established at the University Hospital, Reykjavik and has since then served as the only chromosomal laboratory for all hospitals and physicians in Iceland. Our current aim was to study the physical features, congenital anomalies and various clinical outcomes in Icelandic females, diagnosed with Turner syndrome (TS) for the period of 1968–2012. **Method:** Data was obtained from hospital records, from all pediatric endocrinologists in Iceland and the cytogenetics laboratory making this a nationwide retrospective population study. **Results:** A total of 51 females were diagnosed