

Hyperthyreose und pulmonale Hypertonie

Author/Address of institution:

Dürst Urs Niklaus ^a, Binz Katharina ^b, Brunschwig Thierry ^c, Engel Hermann ^d

- a Praxis für Kardiologie und Innere Medizin, Zollikon
- b Praxis für Endokrinologie und Innere Medizin, Zürich
- c Spital Zollikonberg, Innere Medizin
- d Schilddrüsen-Praxis Zürich, Zollikonberg

Dr. med. Urs Dürst
Facharzt Kardiologie und Innere Medizin FMH
Zollikerstr. 79, CH-8702 Zollikon

Summary:

Pulmonary hypertension in adults with hyperthyroidism is often unrecognized. Although the mechanism is uncertain, the reversal of pulmonary hypertension following restoration to an euthyroid state supports a causal relationship. This case report is of a 71-year-old woman who presented with Morbus Basedow. Echocardiography showed moderate pulmonary hyper-tension with normalisation under the specific therapy.

Key words: Dyspnea, Hyperthyroidism, Pulmonary hypertension

Publication in press: Kardiovaskuläre Medizin

Relationship between adiposity, physical (in)activity, media use and eating habits in preschool children with degree of hyperactivity

Author/Address of institution:

Vincent Ebenegger¹, Simone Munsch², Pedro-Manuel Marques-Vidal³, Andreas Nydegger⁴, Jérôme Barral¹, Tim Hartmann⁵, Susi Kriemler^{6,8} & Jardena J. Puder⁷

- ¹Institute of Sport Sciences, University of Lausanne
- ²Institute of Psychology, Clinical child and adolescent Psychology, University of Lausanne
- ³Institute of Social and Preventive Medicine, University of Lausanne
- ⁴Pediatric Gastroenterology Unit, Department of Pediatrics, University of Lausanne
- ⁵Institute of Exercise and Health Sciences, University of Basel
- ⁶Swiss Tropical and Public Health Institute, University of Basel
- ⁷Service of Endocrinology, Diabetes and Metabolism, University of Lausanne

Background/introduction:

In children suffering from deficit/hyperactivity disorder (AD/HD), an increased prevalence of overweight is observed, probably due to a reduced regulation of their eating behaviour. However, there is a lack of data concerning the relationship between AD/HD symptoms and adiposity or different lifestyle characteristics in young children. Therefore, we assessed the associations between adiposity, physical (in)activity, media use and eating habits in preschoolers with their degree of AD/HD symptoms..

Methods:

As part of the Ballabeina study, 476 preschool children (mean age: 5.2±0.6 years; 52.5% girls) were analyzed. Body composition was measured by bioelectrical impedance and physical activity by accelerometers. Eating habits and media use were assessed using a food-frequency questionnaire and a general questionnaire, respectively and AD/HD using an AD/HD scale of the strength and difficulties questionnaire (SDQ).

Results:

Independently of age and sex, higher degree of AD/HD symptoms was associated with lower percent body fat, more total, moderate-vigorous and vigorous physical activity and less physical inactivity (all p<0.04). However, higher degree of AD/HD symptoms was also associated with more media use and less healthy eating habits like fewer daily servings of fruit and vegetables, more servings of fatty and sweet foods and more frequent eating in front of television (all p<0.02).

Conclusion:

Besides the known association with impulsive eating behaviour, higher degree of AD/HD symptoms is also linked to other unhealthy lifestyle characteristics that may precede the development of further overweight. Precise mechanisms linking AD/HD symptoms to dysfunctional eating, nutritional habits and physical activity behavior should be further investigated. Findings indicating psychological variables such as AD/HD symptoms serve as possible risk factors in the development and maintenance of early childhood obesity should be incorporated into treatment approaches. Strategies fostering self-regulatory strategies could enhance prevention and interventions efforts.

Regulation of fuel metabolism during exercise in hypopituitarism with growth hormone-deficiency (GHD)

Author/Address of institution:

Andrea Egger, Sabin Allemann, Christoph Stettler, Emanuel Christ
Division of Endocrinology, Diabetes and Clinical Nutrition, University Hospital and University of Bern, Inselspital, CH-3010 Bern

Background:

Hypopituitary patients with GHD tend to have a reduced exercise capacity compared with sedentary control subjects. It is established that the lack of growth hormone (GH) results in decreased lean body mass and reduced performance of the cardiovascular system that may explain a reduced exercise capacity. On the other side GH is secreted during exercise, has a strong lipolytic action and has been shown to be positively correlated with exercise performance. We hypothesized that the lack of GH leads to a reduced systemic availability of free fatty acids (FFA) during exercise thereby affecting exercise performance. Whether catecholamine availability increases during exercise, in order to compensate for the lack of the GH-induced lipolysis is not clear.

Methods:

Ten patients with GHD and matched sedentary control subjects were exposed to an increasing workload on a treadmill for the determination of $\dot{V}O_{2max}$. On a separate day, the patients and control subjects performed a 2-hours exercise session on a treadmill with 50-60% of the previously determined $\dot{V}O_{2max}$. Blood samples were taken at baseline and every 30 minutes during the exercise. Analysis of the samples included GH, catecholamines (noradrenaline, adrenaline) as well as glucose and FFA using established methodology. Area under the curve (AUC) of metabolites (glucose and FFA) and hormones (GH and catecholamines) as well as peak concentrations of hormones and metabolites were analysed.

Results:

Ten patients with GHD (4 females, age: 42.5 ± 12.4, years, mean ± SD; BMI: 26.6 ± 3.8 kg/m²; waist: 89.3 ± 12.9, cm) and 10 sedentary control subjects matched for gender, age, BMI and waist (4 females, age: 42.8 ± 12.6, years; BMI: 25.2 ± 5.3 kg/m²; waist: 90.7 ± 19.1, cm) volunteered for the study. GHD patients tended to have a reduced $\dot{V}O_{2max}$ compared with controls (GHD: 36.3 ± 6.7, mlO₂/kg/bodyweight; controls: 41.7 ± 6.0, mlO₂/kg/bodyweight, p = 0.07). GH-AUC and GH peak concentrations were significantly lower in GHD patients compared to sedentary controls (by a factor 15). AUC and peak concentrations of catecholamines were similar in patients and control subjects. FFA-AUC, Glucose-AUC and glucose peak concentrations were not significantly different between the two groups. GHD patients tended to have lower FFA peak-concentrations compared to sedentary controls (patients: 1.03 ± 0.39, mmol/L; controls: 1.51 ± 0.53, mmol/L; p = 0.054).

Conclusion:

This study indicates that a) there is a tendency towards a reduced exercise capacity in GHD patients compared to matched control subjects, b) systemic availability of FFA may be slightly reduced whereas glucose availability is similar during exercise in GHD, c) systemic availability of catecholamines does not compensate for the lack of the lipolytic action of GH in patients with GHD during exercise and d) lack of GH in GHD patients does not translate in major changes in the regulation of fuel metabolism during a 2-hours aerobic exercise.

Implementation of a safe and efficient intravenous insulin protocol in a noncritical care setting

Author/Address of institution:

M. Egli¹, G. Ntaios², D. Joye², J. Ruiz¹, P. Michel²

¹Dept. of Endocrinology, Diabetology and Metabolism, ²Dept. of Neurology, Centre Hospitalier Universitaire Vaudois, CH-1011 Lausanne, Suisse.

Background/Introduction:

Treatment of hyperglycemia by intravenous insulin has become standard of care in the intensive care unit but remains rarely used in noncritical acute care, despite being the most appropriate option when rapid and unpredictable changes of insulin needs occur, or rapid glycemic control is intended. The decision to include tight glycemic control within the first 24 hours in our institutional procedure standards for acute stroke patients led to the call for a treatment protocol which was suitable for the Stroke Unit.

Methods:

The insulin infusion protocol was derived from published protocols based on current glycemia, rate of change of glycemia and insulin sensitivity of the patient. Mealtime insulin coverage by increasing infusion rate to 400% of basal rate during 1 hour was added. Target glycemic ranges were 4 to 6 mmol/l fasting and < 8 mmol/l postprandial. Initial fears and concerns of the medical and nursing staff were addressed by building up an ongoing collaboration with the staff leaders of both professions from the initial steps of development of the protocol, order sheets, educational activities and materials. Implementation was gradual (5 patients in 2007, 28 in 2008, 47 in 2009). Glycemic and insulin data of the first 90 stroke patients admitted with either known diabetes (N=38) or new-onset hyperglycemia (N=52) were analyzed, totaling 2715 hours of treatment.

Results:

Median treatment duration was shorter (26.5 [IQR 21-36.3] vs. 34.5h [24-39]; p=0.03) and glycemic control slightly better (5.3 [4.7-6.0] vs. 5.8 mmol/l [5.0-6.7]; p<0.001) in new-onset hyperglycemic than in diabetic patients. Time to glycemic target (4-6 mmol/l) was 7h [4.0-8.25] vs. 5h [4.0-9.75] (p=ns). During the following 24 hours of treatment, percentage of glycemia in target was 81.3% vs. 70.4% (94.6% vs. 90.3% with a target of 4-8 mmol/l). Rate of hypoglycaemia was low in both groups (3.1% vs. 3.9% of values <4.0 mmol/l, 0.2% vs 0.4% of values <3.3 mmol/l). Postprandial glycemic control was comparably efficient in both groups (glycemic excursions 1.7 [0.6-3.7] vs. 2.6 mmol/l [0.7-3.9]; N=75; p=ns).

Conclusion:

Intravenous insulin in noncritical acute care is feasible, highly efficient and safe even with targets corresponding to normoglycemia. The perceived reliability of the protocol contributed to its high acceptance by the involved healthcare professionals. The present protocol can serve as a basis for adaptations to other clinical contexts such as perioperative insulin therapy, with less stringent glycemic targets further enhancing its safety, as well as a tool in clinical studies on glycemic control in acute care outside the ICU.

Jahresversammlung Assemblée annuelle

2010

18. und 19. November 2010
le 18 et 19 novembre 2010

Inselspital Bern

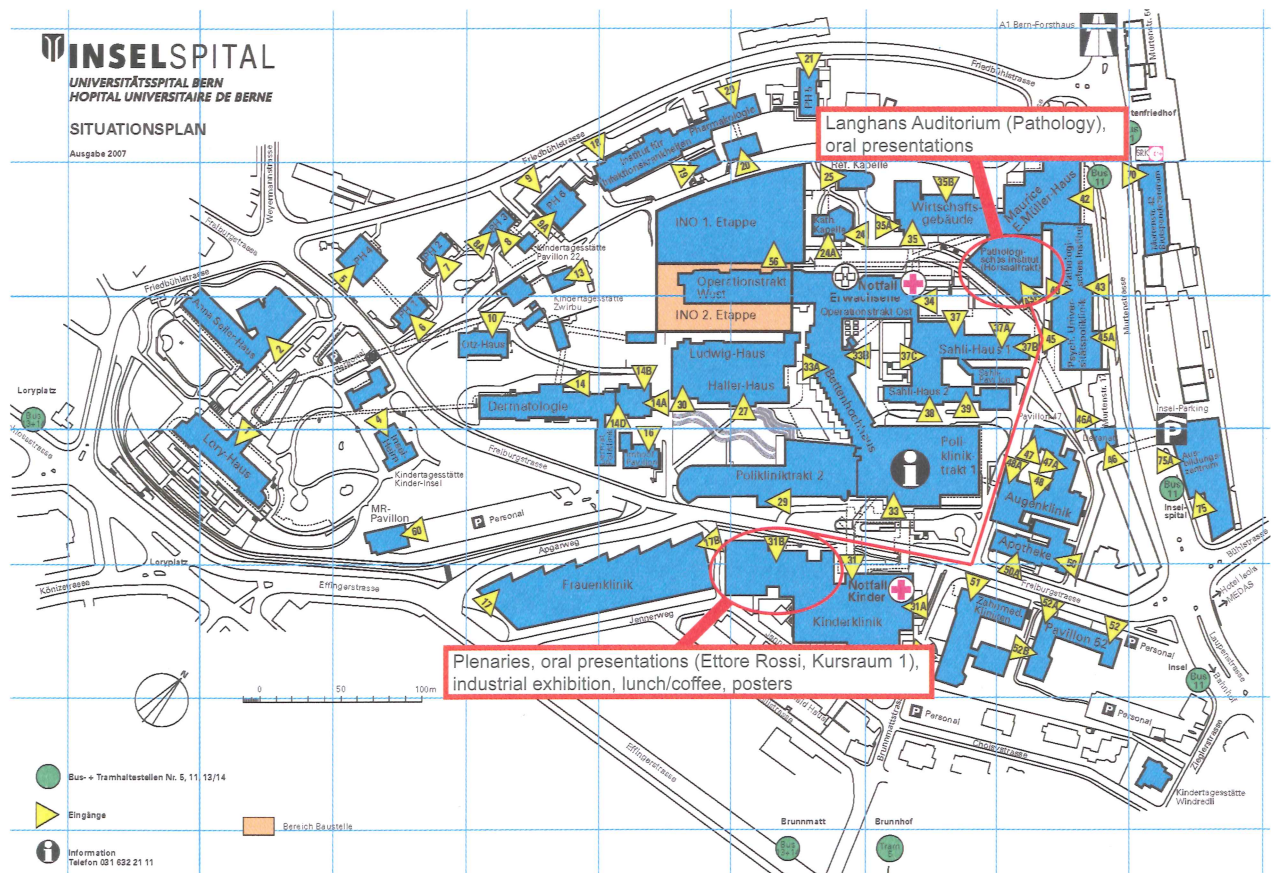
Schweizerische Gesellschaft für
Endokrinologie und Diabetologie - SGED

Société Suisse d'Endocrinologie
et de Diabétologie - SSED



Contents

	page
Program of the Annual Meeting SGED-SSED	4
Program of the Scientific Meeting ASEMO-SAMO	6
Oral presentations «islets and...» – Session 1	8
Oral presentations «sex steroids and...» – Session 2	8
Oral presentations «miscellaneous» – Session 3	9
Oral presentations «beta cells and adipose tissue» – Session 4	10
Poster presentations	11
Abstracts	14 – 32
Traktanden GV / Ordre du jour	33
Galadinner	35
Sponsoren / Contributeurs	36



Kontaktadresse:

Schweizerische Gesellschaft für
Endokrinologie und Diabetologie
Rütistrasse 3a
CH-5400 Baden
Tel. 056 200 17 90, Fax 056 200 17 95
office@sgedssed.ch, www.sgedssed.ch



Association Suisse pour l'Etude du
Métabolisme et de l'Obésité
Schweiz. Arbeitsgruppe Metabolis-
mus und Obesitas



Schweizerische Gesellschaft für
Endokrinologie und Diabetologie
Société Suisse d'Endocrinologie
et de Diabétologie

Programme of the 5th Annual Meeting ASEMO-SAMO

Association Suisse pour l'Etude du Métabolisme et de l'Obésité
Schweiz. Arbeitsgruppe Metabolismus und Obesitas

(preceding the Annual Meeting of SGED)

Thursday, November 18, 2010, Inselspital Bern, Kinderklinik

Update lectures and new issues

Chairman: *Alain Golay*

9.15 – 10.00 **Overweight and obesity in Switzerland: costs and future prospects.**
Heinz Schneider, Basel

Research Communications

Chairmen: *Abdul Dulloo, Yves Schutz*

10.00 – 10.15 **Abstract 67 – PI3K γ in Non-Hematopoietic Cells Plays a Major Role in the Promotion of Obesity, Inflammation, and Glucose Intolerance**
Giovanni Solinas, Romina Marone, Barbara Becattini, Fabio Zani, Abdul G. Dulloo, Jean-Pierre Montani, Frederic Preitner, Matthias P. Wymann; Fribourg, Basel, Lausanne

10.15 – 10.30 **Abstract 1 – Skeletal muscle insulin resistance and lipotoxicity: differential effects of diacylglycerols and ceramides**
Francesca Amati, Bret H. Goodpaster; Lausanne, Pittsburgh

10.30 – 10.45 **Abstract 33 – A multifactorial approach to prevent adiposity and improve fitness in predominantly migrant preschool children: cluster-randomized controlled trial (the Ballabeina Study)**
Puder JJ, Marques-Vidal P, Zahner L, Niederer I, Bürgi F, Ebenegger V, Hartmann T, Meyer U, Schindler Ch, Nydegger A, Kriemler S; Lausanne, Basel

10.45 – 11.00 **Abstract 25 – Cardiorespiratory fitness prevents the increase in blood pressure due to body fat in adolescents**
Gisela Marcelino, João Melich-Cerveira, Fred Paccaud, Pedro Marques-Vidal; Lisbon, Lausanne

11.00 – 11.30 Break with Coffee and Juice

Chairpersons: *Kurt Laederach, Anne Laurent-Jaccard*

11.30 – 12.15 **Obesity as cancer risk factor**
André-Pascal Sappino, Geneva

12.15 – 12.45 **Bariatric surgery : the final cure for diabetes?**
Ulrich Keller, Basel

12.45 End of the scientific ASEMO meeting

12.45 – 13.45 General Assembly of ASEMO for members

Access is free.

Inquiries:

Prof. Alain Golay, Head, Service of Therapeutic Education for Chronic Diseases
University Hospitals of Geneva
Rue Gabrielle-Perret-Gentil 4
CH-1211 Geneva 14, Switzerland
Phone +41 22 372 97 26
Fax +41 22 372 97 15
Direct: +41 372 97 04
E-Mail: Alain.Golay@hcuge.ch

Poster presentations

Friday, 19 November, 12.15 – 14.00

Ettore Rossi and U1

CLINICAL

- 2 **Case report of an incidentally discovered TSH-secreting pituitary adenoma**
Claudine A. Blum, Isabelle Suter, Luigi Mariani, Henryk Zulewski (Basel)
- 4 **Evaluating the Cost-Effectiveness of Self-Monitoring of Blood Glucose in Type 2 Diabetes Patients on Oral Anti-Diabetic Agents: A Long-Term Modeling Study in Switzerland**
M. Brändle, W.J. Valentine, G. Goodall, R.F. Pollock (St. Gallen, Basel)
- 5 **Pituitary apoplexy – a series of five cases**
Lukas Burget, Stefan Fischli, Isabelle Simon-Vermot, Christoph Henzen (Luzern)
- 6 **Adherence to type 2 diabetes treatment recommendations issued by the Swiss Society for Endocrinology and Diabetes: a critical appraisal**
Konstantin Burgmann, Sandra A. Fatio, Beat Jordi, Jonas Rutishauser (Biel)
- 8 **Burden of disease attributable to obesity and overweight in Switzerland**
Carol Davin, Peter Vollenweider, Gérard Waeber, Fred Paccaud, Pedro Marques Vidal (Lausanne)
- 9 **Hyperthyreose und pulmonale Hypertonie**
Dürst Urs Niklaus, Binz Katharina, Brunschwig Thierry, Engel Hermann (Zollikon, Zürich)
- 10 **Relationship between adiposity, physical (in)activity, media use and eating habits in preschool children with degree of hyperactivity**
Vincent Ebenegger, Simone Munsch, Pedro-Manuel Marques-Vidal, Andreas Nydegger, Jérôme Barral, Tim Hartmann, Susi Kriemler, Jardena J. Puder (Lausanne, Basel)
- 13 **Challenges in the diagnosis of late dumping syndrome in patients post-bariatric surgery**
Lucie Favre, François Pralong, Nelly Pitteloud, Vittorio Giusti
- 14 **Diffuse nesidioblastosis with hypoglycemia mimicking an insulinoma: a case report**
Chiara Ferrario, Deplhine Stoll, Maurice Matter, Jardena Puder (Lausanne)
- 15 **Malignant pheochromocytoma treated with sunitinib – a case report**
Stefan Fischli, Marie-Thérèse Henzi, Thilo Zander, Christoph Henzen (Luzern)
- 17 **Insulinoma in childhood – prone to be misdiagnosed**
T. Gozzi Graf, M. Brändle, Th. Clerici, D. l'Allemand (St. Gallen)
- 18 **Testis developmental genes expression in cryptorchid boys risking azoospermia**
F. Hadziselimovic, N.O. Hadziselimovic, P. Demougin, E.J. Oakeley (Liestal, Basel)
- 20 **Severe diabetic gastroparesis – successfully treated with aprepitant**
Tomas Karajan, Christian Schandl, and Christoph Henzen
- 21 **How to worm out an unexpected finding in a large adrenal**
Lipowsky C, Krull I, Fretz Ch, Maier-Woelfle M, Brändle M (St. Gallen)
- 23 **Trends in bariatric surgery in Portugal, 2000–2005**
Gisela Marcelino, João Melich-Cerveira, Fred Paccaud, Pedro Marques-Vidal (Lisbon, Lausanne)
- 24 **Trends in bariatric surgery in Switzerland, 1998–2008**
Gisela Marcelino, João Melich-Cerveira, Fred Paccaud, Pedro Marques-Vidal (Lisbon, Lausanne)

- 26 **Overweight and obesity are unevenly distributed among migrants in Switzerland**
Pedro Marques-Vidal, Peter Vollenweider, Gérard Waeber, Fred Paccaud (Lausanne)
- 27 **Thyroid surgery in eastern Switzerland: who operates, how often and how radically?**
C.F. Maurus, W. Kolb, N. Kalak, Th. Clerici (St. Gallen)
- 28 **Body image and desire to change weight in the adult Portuguese population**
João Melich-Cerveira, Gisela Marcelino, Fred Paccaud, Pedro Marques-Vidal (Lisbon, Lausanne)
- 29 **Prevalence of childhood obesity in Switzerland depends on the definition applied**
João Melich-Cerveira*, Puder Jardena*, Gisela Marcelino, Vincent Ebenegger, Iris Niederer, Flavia Bürgi, Susi Kriemler, Pedro Marques-Vidal (Lisbon, Lausanne, Basel)
*both authors contributed equally
- 30 **Trends of body image and desire to lose weight in the adult Swiss population, 1997–2007**
João Melich-Cerveira, Gisela Marcelino, Fred Paccaud, Pedro Marques-Vidal (Lisbon, Lausanne)
- 34 **Heart failure as presenting sign of panhypopituitarism in a child with a microdeletion including the LHX-4 Gene**
Renner A, Filges I, Röthlisberger B, Glanzmann R, Günthard J, Miny P, Huber A, Zumsteg U, Szinnai G (Basel, Aarau)
- 36 **A first approach towards a food monitoring system for diabetes diet management**
Luca Scarnato, Elena Daskalaki, Peter Diem, Stavroula Mouggiakakou (Bern)
- 37 **Prospective assessment of three frequently used blood glucose meters in clinical routine**
Vanessa Schuler, Thomas Züger, Christoph Stettler, Peter Diem, Emanuel Christ (Bern)
- 40 **Symptomatic hypocalcemia with low PTH related to severe hypomagnesemia
Two clinical cases**
Lea Slahor, Emanuel Christ, Rahel Sahli, Christoph Stettler (Bern)
- 41 **Graves' Hypothyroidism**
Lea Slahor, Stefan Fischli, Christoph Henzen (Luzern)
- 42 **Swiss neuroendocrine tumour (SwissNET) registry: results after 30 months**
C. Stettler, S. Allemann, E.R. Christ, C. Schwarzenbach, S. Wagner, F. Pralong, F. Forrer, Th. Clerici, W. Kolb, F. Triponez, A. Perren (Bern, Lausanne, Basel, St. Gallen, Geneva)
- 43 **An unusual cause of thyrotoxicosis**
Regina Streuli, Christian Riklin, Stefan Fischli, Christoph Henzen (Luzern)
- 45 **Meta-analysis of children with Multiple Endocrine Neoplasia Type 2A from 1995–2009: Impact of RET mutation analysis and Consensus Guidelines on age at thyroidectomy over the last 15 years**
Szinnai G, Sarnacki S, Travagli JP, Schlumberger M, Polak M (Basel, Paris, Villejuif)
- 46 **Predicting a nervus laryngeus non-recurrens preoperatively by ultrasound – an effective tool to avoid nerve damage and postoperative nerve palsy in thyroid surgery**
S. Zimmermann, W. Kolb, M. Zadnikar, T. Clerici (St. Gallen)