



Closing Remarks

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General comments

Awards

Experts' lectures

Basic science

Genetics

Trials

Treatment
options

Diagnosis

HAE-nC1-INH

Scoring & QoL

Registries,
Cohorts,
Centers,
Organisations

Farewell

NON-CONVENTIONAL DIAGNOSTICS

GENES AND CASCADES

THE ATTACK IN THE LIMELIGHT

SORTING THINGS OUT: HAE-FXII

MANAGEMENT FINE-TUNED

ANGIOEDEMA AVALANCHE

THE SHADES OF FREEDOM – NURSING ROUND

**TABLE DISCUSSION → foundation of the «HAE
International Nursing Organization»**

LIVING WITH HAE AROUND THE WORLD

MIXING IT WITH THE AUTHORS – SCIENCE IN THE SHOP-
WINDOW

SOCIAL PROGRAMS



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This was a great and very fruitful meeting!

The plaudit goes also to Diamond company

The satisfaction of Konrad Bork – Session HAE-FXII

Proposal: next WS giving satisfaction to the Milan group by having a Surprise Session! (O-24)

My satisfaction

- Achieved to put complement into the right context
 - Not the immune complex-mediated but a pattern recognizing pathway-mediated activation of interest
 - The interconnection to inflammation – interconnection of lectin pathway and contact activation on various levels
 - Disease modifying
 - Diagnostic tests shifting to contact activation proteins

My dissatisfaction

- The name of the WS not reflecting the move



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“For HAE Patients”: warm congratulations to
Henriette and Lilian for continuous enthusiasm
through decades

“For HAE Research”: congratulations to Dr. Kaplan,
USA



Even as awardee
there is no
free lunch!





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“Grant for Young Investigators”: the four grants go to

- **Csuka Dorottya, Hungary (oral 2nd time)**
Activation of the ficolin-lectin pathway during attacks of hereditary angioedema
- **Madsen Daniel, Denmark (oral)**
Immunological method for specific measurement of C1-inh polymers in plasma and C1-inh concentrate
- **López Lera Alberto, Spain (poster, 2nd time)**
No evidence for disease-modifier genes in the PBMC expression profile from HAE patients in basal conditions. An RNA-based microarray screening
- **Szabó Erika & Zotter Zsuzsanna, Hungary (poster)**
Home treatment of attacks with conestat alfa in hereditary angioedema due to C1-inhibitor deficiency (HAE-C1-INH)
- *Thanks to the industry for the generous sponsoring*



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- *Francois Marceau, Canada*: Bradykinin receptors: agonists, antagonists, expression, signaling and adaptation to sustained stimulation
- *Coen Maas, The Netherlands*: The protease storm of angioedema
- *Peter Gál, Hungary*: Activation and regulation of the lectin pathway of the complement system
- *Allen Kaplan, USA*: “For HAE Research” prize-winner lecture
- BK: cardinal signs of inflammation – dependent on vascular responses, e.g. receptors (Marceau, Maas)
- Why blood coagulation activation remains marginal? (Maas, Kaplan, others)
 - Discrepancy *in vivo* facts and *in vitro* diagnostic testing
 - Complexity of FXII activation: FXIIa (α FXIIa & surface) vs FXII_f (β FXIIa, not surface bound)
- For understanding & optimal treatment in the future we will need learning, learning, learning!



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FXII gene: new deletion in Turkish families

SERPING1

- *De-novo* homozygous mutation of C1-INH gene
- Regulation total vs allele-specific mRNA at the transcriptional level
- Number of mutations increasing and increasing (Brazil)
- Gneotype → phenotype: remains controversial, very large numbers of patient data might help

Microarray techniques

- PLAUR (uPAR) & ADM
- PBMC – no clear-cut results; HSP90? (from Dr.Kaplan's presentation)



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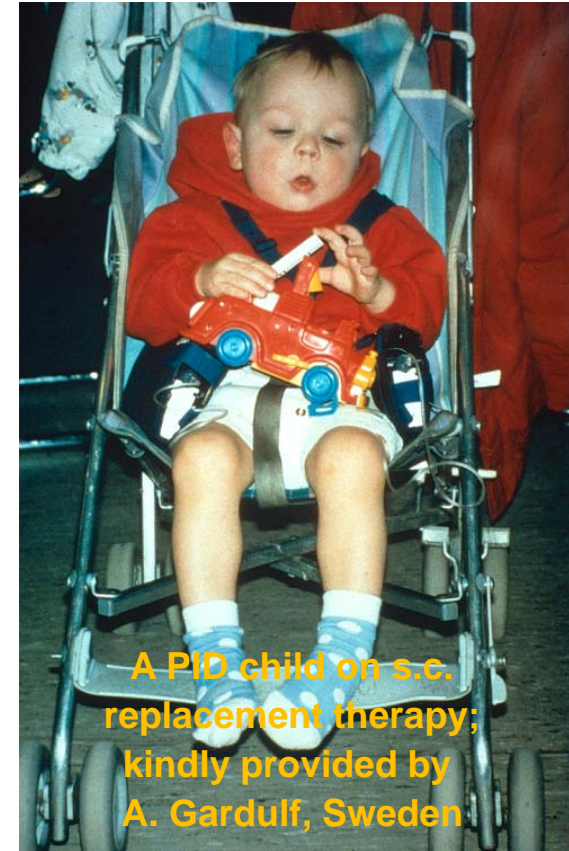
- The wave of big clinical HAE trials ebbs away
- Some industry catching up
- Completing marketing authorizations: pediatric, subcutaneous, self-administration
- QoL studies
- Outlook: monoclonal(s) → half-life↑



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- A possible duty of the audience: minimum requirement treatment to be established?
- Overviews of treatments: not to forget outlining of evolution of data collection
- Adverse events
 - Agreement how to assess
 - Not to forget mentioning (accumulative) doses
- Presentation of results: impressing statistics – nevertheless, how about (estimation of) biological relevance?
- Long-term prophylaxis vs on demand: number of attacks can be reduced but not prevented; a question of healthcare politics – does this audience take the lead?

- Women with HAE
 - Progestins
 - Breast cancer: GnHR analogs
- Early in attack development!
- Self-administration children
- Future: guided, personalized
- Observational data from daily use: comparison of efficacy of drugs emerge
- Pharmacoeconomic assessments might become possible



A PID child on s.c.
 replacement therapy;
 kindly provided by
 A. Gardulf, Sweden



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- Various diagnostic tests of contact activation and control are popping up
- Feasibility of routine application to be shown
- Everything around bradykinin assessment → proposal: invite next time for discussion an expert on BK assessment
- Consensus how to collect blood/plasma for these new tests (cocktail of inhibitors needed?)
- Value of target enzyme-inhibitor complexes when using the right cocktail of inhibitors)?



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- Congratulation – the baby is born!
 - Health Related Quality of Life (HRQoL) as measured by SF-36v2 in adults with Hereditary Angioedema due to C1-inhibitor deficiency
- Other questionnaires presented – which one the best/to select for which type of questions in future?
- Additional efforts ongoing (pharmacoeconomics)



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- Registries/Population studies

- Greece

- Latin America

- Macedonia

- Romania

- Slovenia

- South Africa

- Sweden

- Switzerland

- HAE patient organization in individual countries & HAEi



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Our fugacy – but life is going on; as the French say:
le roi est mort, vive le roi!

For us: The spiritus rector of the C1-INH Deficiency
Workshops is dead – let's hurrah the Angels!

With the very successful organization of this
Workshop the Angels have demonstrated that they
can fly by their own wings.



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Have a safe trip home
See you latest in two years