

**Scandinavian Society of Anaesthesiology and Intensive Care**

**NORDIC EDUCATION IN ADVANCED PAIN MEDICINE FOR  
ANAESTHESIOLOGISTS**

**DENMARK, FINLAND, ICELAND, NORWAY AND SWEDEN**

August 2003

## **Contents**

### **Abstract**

### **I. Introduction**

- 1.1. Educational board
- 1.2. Purpose of the report

### **II. Pain**

- II.1. The pain problem
- II.2. Classification of pain conditions
- II.3. Epidemiology
  - II.3.1. Acute, postoperative and posttraumatic pain
  - II.3.2. Long-term/chronic pain conditions
    - II.3.2.1. Long-term/chronic non-cancer pain conditions
    - II.3.2.2. Pain conditions of cancer origin
- II.4. Societal economy

### **III. Actual situation for the treatment of long-term/chronic pain and education in the Nordic countries**

- III.1. Long-term/chronic non-cancer pain conditions
- III.2. Pain conditions of cancer origin
- III.3. Conclusion

### **IV. Description of the supraspecialist area: Algology**

- IV.1. Definitions
  - IV.1.1. Acute, postoperative and posttraumatic pain
  - IV.1.2. Long-term/chronic non-cancer pain conditions
  - IV.1.3. Cancer pain conditions
- IV.2. Patient population to be evaluated and treated within the specialist area
- IV.3. Criteria for referral to the specialist area

### **V. Level of qualification for the specialist area**

### **VI. Classification of pain treatment units**

- VI.1. Pain Clinic
- VI.2. Multidisciplinary pain centre
- VI.2. Classified pain units in the Nordic countries
  - VI.2.1. Denmark
    - VI.2.1.1. Classified multidisciplinary pain centres
    - VI.2.1.2. Classified palliative units
  - VI.2.2. Finland
    - VI.2.2.1. Classified multidisciplinary pain centres
    - VI.2.2.2. Classified palliative units
  - VI.2.3. Iceland
  - VI.2.4. Norway
    - VI.2.4.1. Classified multidisciplinary pain centres
    - VI.2.4.2. Classified palliative units
  - VI.2.5. Sweden
    - VI.2.5.1. Classified multidisciplinary pain centres
    - VI.2.5.2. Classified palliative units

### **VII. The pain medicine specialist education program**

- VII.1. Components in the specialist education
  - VII.1.1. Clinical part of the education
  - VII.1.2. Theoretical part of the education
    - VII.1.2.1. Courses
    - VII.1.2.2. Additional educational activities
- VII.2. Diploma/examination
- VII.3. Interim solution
  - VII.3.1. Theoretical part of the interim solution
  - VII.3.2. Clinical part of the interim solution

### **VIII. Theoretical courses**

- VIII. 1. Courses/topical seminars
  - VIII.1.1. Sweden + ?(introduction, acute pain)
  - VIII.1.2. Finland/Iceland
  - VIII.1.3. Denmark
  - VIII.1.4. Norway
  - VIII.1.5. Sweden
- VIII.2. Number of participants

### **IX. Economy**

### **X. Announcement**

### **XI. Educational and course secretariat**

### **XII. References**

## **NORDIC EDUCATION IN ADVANCED PAIN MEDICINE**

### **Abstract**

The Nordic education in advanced pain medicine was established within the frames of Scandinavian Society of Anaesthesiology and Intensive Care Medicine (SSAI). The report is prepared by representatives from Denmark, Finland, Iceland, Norway and Sweden.

There are in the Nordic countries only few doctors who have been educated in and who have experience in treatment of long-term/chronic pain of as well cancer as non-cancer origin.

An education in algology is established in Sweden (1996) and Finland (1998), but in none of the other Nordic countries.

Anaesthesiologists have expert knowledge and skills in treatment of acute pain, which can be applied to many aspects of cancer related pain. However, they are often asked for or expected to take care of patients with long-term/chronic non-cancer pain. Basic training of anaesthesiologists does not prepare them sufficiently for this more complicated task.

The report describes the speciality algology within the frames of the long-term/chronic pain area. As the education is designed for anaesthesiologists, acute pain also has an integral part of it.

The report contains a description of the actual problems.

A short historical review is given on pain and pain treatment addressing the actual concept on long-term/chronic pain as being a complex bio psychosocial condition with large individual differences.

Epidemiological and societal economic conditions are mentioned. Long-term/chronic pain is a "hidden epidemic" accompanied not only with often unnecessary human suffering, but also enormous societal costs. Even if some improvements have taken place within the cancer pain area, the situation is still far from satisfying.

The present report describes the general pain patient population and divides the pain conditions in slightly, moderately or severely complicated. It is stressed that the division is based on the complexity of the pain conditions. The pain population of interest for the specialist area are the patients with moderately or severely complex pain conditions. A list summarizing general qualifications for the pain specialist is given together with suggestions for criteria for referring of patients to the specialised centres or clinics.

A plan for classifying hospital bound pain units in multidisciplinary pain centres (in university hospitals) and pain clinics is suggested.

The educational plan is built up in a clinical and a theoretical part. The clinical part should last at least 3 months and take place in a classified multidisciplinary pain centres or a pain unit accepted by the educational board.

The theoretical part of the education consists of 5 courses lasting 3 days and containing the educational proposals given by IASP in its "Core Curriculum for Professional Education in Pain". The courses will be arranged in the different Nordic countries by local organizing committees. In addition to these courses participation in some specified postgraduate courses and symposia will be mandatory.

To obtain the specialist competence in algology for doctors already working fulltime within the pain area participation in all the theoretical courses is necessary.

## **I. Introduction**

The education is established within the frames of the Scandinavian Society of Anaesthesiology and Intensive Care (SSAI).

### ***1.1. Educational board***

Members of the educational board (2006):

#### **Denmark:**

Jørgen Eriksen, H:S Multidisciplinary Pain Centre, Rigshospitalet, Copenhagen  
Niels-Henrik Jensen, Multidisciplinary Pain Centre, Herlev Hospital, Copenhagen

#### **Finland:**

Eija Kalso, Pain Clinic, University Hospital, Helsinki  
Per Rosenberg, Anaesthesia Department, University Hospital, Helsinki

#### **Iceland:**

Gudmundur Björnsson, Anaesthesia Department, Landspítali, Reykjavík  
Bjarni Valtýsson, Anaesthesia Department, Landspítali, Reykjavík

#### **Norway:**

Petter Borchgrevink, Multidisciplinary Pain Centre, St. Olavs hospital, Trondheim (*secretary*)  
Harald Breivik, Pain Clinic, Rikshospitalet, Oslo

#### **Sweden:**

Steven Butler, University Hospital, Uppsala  
Torsten Gordh, Pain Centre, University Hospital, Uppsala (*chairman*)  
Karl-Fredrik Sjögren, Pain Centre, Karolinska Hospital, Stockholm

### ***1.2. Purpose of the report***

The purpose with the report is to describe the subspecialty algology defined as long-term/chronic treatment of pain of cancer and non-cancer origin. Furthermore to describe the patient population and the medical competence needed for evaluation and treatment of these patients. Finally, to describe the joint educational plan for anaesthesiologists in the Nordic countries and a future organisation plan.

Although the initiative came from SSAI and the report is prepared by anaesthesiologists, algology for anaesthesiologists has several areas of interaction with other medical specialities.

In the education of anaesthesiologists emphasis is laid on understanding of acute pain and achievement of optimal postoperative pain relief.

Specialist educations in algology have already been established in Sweden (since 1996) and in Finland (since 1998) as supraspeciality for several traditional specialities in medicine. Major parts of the report is based on the Swedish education plan and its background (1).

## **II. Pain**

### ***II.1. The pain problem***

Insufficient knowledge on pain and pain treatment has been a problem for many years. Already in 1953 Bonica in his book "The Management of pain" (2), summarised the problems as:

- a. insufficient knowledge on pain and pain mechanisms
- b. insufficient knowledge on and use of already existing knowledge, and
- c. insufficient communication between basic scientists and clinicians.

In the latest edition of this book (2000) it is stated that these problems still exist.

At the same time Bonica stated that chronic pain should be considered, evaluated and treated as an independent disease entity, having not only physical (biological), but also psychological and socioeconomic implications.

A modern multidisciplinary treatment of long-term/chronic pain conditions focuses on the patient's total situation within the physical (biological) psychological and social areas. The biologically orientated part of pain treatment now seldom comprises disruption of pain tracts (neurosurgical procedures or neurolytic blockades), but consists more often in pharmacological therapies with the purpose of preventing the central sensitisation, which may occur in connection with tissue- and nerve damages. Pain mechanism-based

classification of the pain conditions and corresponding treatments are now common. At the same time interventions are made against the often complicating associated psychological and socioeconomic problems.

## ***II.2. Classification of pain conditions***

- \* Acute pain conditions
- \* Pain conditions of cancer origin complicated by a reduced quality of life and a reduced lifetime expectancy
- \* Long-term/chronic pain conditions of non-cancer origin resulting in a considerable reduced quality of life, but not necessary a reduced lifetime expectancy

## ***II.3. Epidemiology***

### ***II.3.1. Acute, postoperative and posttraumatic pain***

Still 1/3 to 1/2 of patients with acute postoperative and posttraumatic pain suffer from unrelieved severe pain which increases risks of cardiovascular and pulmonary morbidity and mortality.

### ***II.3.2 Long-term/chronic pain***

Long-term/chronic pain conditions are in all the Nordic countries one of the health care systems greatest problem areas and are all over the world one of the most frequent reasons for human suffering and reduced quality of life.

#### ***II.3.2.1. Long-term/chronic non-cancer pain conditions***

Good prevalence investigations unfortunately do not exist. However it is anticipated that almost one fourth of the worlds population suffer from long term/chronic pain. The need for specialised treatment is estimated to comprise 7-10% of the population in the western world (3).

#### ***II.3.2.2. Pain conditions on cancer origin***

About 60.000 people die every year in the Nordic countries because of cancer. Out of these 70-90% will experience pain (and other symptoms) in the more advanced stages of the disease. Most cancer patients with pain are taken care of by their general practitioner, but some of the patients need specialised treatment in pain clinics, -centres or palliative units.

## ***II.4. Societal economy***

Not only the human suffering but also the societal costs are beyond computation. Enormous economic resources have through the years been used for prevention and treatment without essentially having had any measurable consequences. The number of patients with long-term/chronic pain complaints is still increasing.

The societal costs comprise direct expenditures to often unnecessary investigations and treatments (which in some cases may even worsen the pain), compensation and/or support during disease and invalidity, and indirectly through loss of working capacity (3-7).

## **III. Actual situation for the treatment of long term/chronic pain and education in algology in the Nordic countries**

Few doctors in the Nordic countries are educated and experienced in taking care of the evaluation and treatment of patients suffering from long term/chronic pain of both cancer and non-cancer origin.

A subspecialist education in algology has been established in Sweden (1996) and in Finland (1998). In the other Nordic countries none of the existing medical specialities give the necessary competence within the complex difficult accessible long term/chronic pain area.

There are in Denmark, Iceland and Norway insufficient educational plans for the area and the capacity for education is minimal.

### ***III.1. Long-term/chronic non-cancer pain conditions***

Knowledge on the complexity of long term /chronic non-cancer pain conditions, which involve difficulties in evaluation and treatment, is only to a limited degree present within the existing basic specialist training of medical specialities. This accounts also for the specialities traditionally taking care of this patient category.

### ***III.2. Pain conditions of cancer origin***

Even if the basic principles for pain treatment of cancer patients at this time should be known by most doctors, the knowledge is unfortunately still insufficient (8) and still too many cancer patients are suffering unnecessarily.

### ***III.3. Conclusion***

We consider it of great importance that a subspecialist education within the area long-term/chronic pain of cancer and non-cancer origin is established. The specialist education should have its basis in a primary specialist education within a relevant clinical medical speciality.

For anaesthesiologists, knowledge and skills in treating acute pain is the direct reason for their involvement with pain patients. This part of the training of anaesthesiologists must be strengthened, and those who want to subspecialise in pain medicine must receive specific, advanced training in handling patients with chronic, complex pain conditions.

Initially the education offered by SSAI will be limited to anaesthesiologists. Later on doctors from other medical specialities may participate.

## **IV. Description of the subspecialist area: Advanced Pain Medicine (Algology)**

### ***IV.1. Definitions***

#### ***IV.1.1. Acute and postoperative pain***

Nociceptive pain after surgery varies from mild to severe. There is always peripheral and central sensitisation with primary and secondary hyperalgesia. When movement causes severe pain, postoperative cardiorespiratory complications may result. Central sensitisation from acute nociceptive pain may persist and develop into complex neuropathic pain conditions after surgery: Skilful relief of acute postoperative pain will reduce the incidence and severity of acute postoperative complications and chronic postoperative pain.

#### ***IV.1.2. Long-term/chronic non-cancer pain conditions***

##### **a. Slightly complex pain conditions:**

Long-term/chronic pain conditions without complicating psychological and social problems.

E.g.: Low back pain in patients, who with or without a relevant pharmacological treatment can maintain their employment activities and who are not psychologically and socially affected by their pain

condition. These patients should be taken care of by the general practitioners.

##### **b. Moderately complex pain conditions:**

Long-term/chronic pain conditions without serious complicating psychological or social problems.

However, specific knowledge is necessary for establishing the pain diagnosis and treatment. A relevant instituted and maintained treatment will secure, that the patient is able to maintain his working-

ability.

E.g.: Patients suffering from uncomplicated neuropathic pain conditions such as peripheral polyneuropathy, postherpetic pain, trigeminal neuralgia etc.

##### **c. Severely complex pain conditions:**

Long-term/chronic pain conditions, which because of their intensity and/or duration are complicated with severe and treatment demanding psychological and social problems.

E.g.: Severe back pain in patients who because of their pain condition, totally or partly have lost their working ability, are in economic difficulties, live from sickness benefit or consider a pension, are having complicating anxiety or depression and need social and psychological intervention.

#### ***IV.1.3. Cancer pain conditions***

d. Slight pain related to the cancer disease

Should be taken care of by the general practitioners.

e. Moderately complex cancer related pain

Patients who need a more specified pain diagnosis

Patients who need a differentiated medicament therapy and/or possibly invasive pain treatment.

f. Severely complex cancer related pain

Complex symptomatology consisting in several embarrassing physical symptoms. The pain condition demands further diagnostics, differentiated pharmacological treatment and/or invasive procedures.

In addition psychological and social interventions are needed and there may be a large need of physical care.

#### ***IV.2. Patient population to be evaluated and treated within the subspecialist area***

A. Patients suffering from moderately and severely complicated long-term/chronic non-cancer pain conditions.

B. Patients suffering from moderately and severely complicated cancer related pain conditions.

C. Patients suffering from severe and difficult treatable acute and postoperative pain conditions (depending on the specific organisation of acute pain treatment in the hospital or region).

#### ***IV.3. Criteria for referral to the specialist area***

\* Before referral patients suffering from long-term/chronic non-cancer pain should in general have completed a total investigational program within the etiological orientated specialities.

\* Patients in whom the reason for the pain condition is not obvious (undiagnosed neuropathic pain, psychological and/or social problems).

\* Patients whose jobs are threatened because of pain.

\* Patients suffering from severe associated psychological/psychiatric complications like anxiety and/or depression.

\* Patients with other difficult psychological problems/complications.

\* Patients in whom a more specific pain diagnosis is necessary for establishment of a rational pharmacological treatment.

\* Patients in whom a conventional analgesic treatment is not sufficient.

\* Patients with escalating and/or unstable use of opioids.

\* Patients in whom invasive treatment is considered.

\* Patients in who invasive nerve destructive procedures are considered.

\* Ongoing cases like disability pension or compensation should be settled before referral.

### **V. Level of qualification for the specialist in algology**

The specialist must be capable of:

\* performing a specific pain analysis based on a careful pain history and a relevant objective investigation which must include testing of skin sensibility.

\* categorising of the physiological and/or pathophysiological components in order to establish a mechanism

based pain diagnosis

\* deciding if the pain condition diagnostically/etiologically definitively is clarified so that

curative/etiological treatment no longer is possible - if necessary in collaboration with other medical specialities.

- \* evaluating not only the actual psychological and social interactions but also these conditions when the pain began.
- \* evaluating the consequences of the pain for the patients' life.
- \* identifying associated psychiatric complications and differential diagnoses - anxiety, depression, somatisation and conditions of cognitive dysfunction.
- \* Based on the above mentioned circumstances, planning of an individual treatment, which may consist of one or more of the following components depending on the individual patients' actual problems:
  - \*\* rational pharmacological pain treatment using conventional analgesics, secondary analgesics and other drugs, administered orally or by invasive techniques.
  - \*\* electrostimulation techniques.
  - \*\* pharmacological treatment of associated psychiatric diseases.
  - \*\* advise, counselling and support in social matters.
  - \*\* physical rehabilitation.
  - \*\* instruction in relevant psychological pain modulating techniques (e.g. relaxation, visualisation).
  - \*\* psychological pain treatment (cognitive behavioural therapy).

## **VI. Classification of pain treatment units**

Internationally specialist staffed pain treatment units are divided into: modality orientated clinics, pain clinics and multidisciplinary pain centres.

Transferred to the Nordic countries and adjusted to the international classification requirements (9) the mentioned hospital-bound units may be defined and separated as following:

### ***VI.1.1. Pain Clinic***

A treatment unit for patients suffering from pain of more acute character and of slightly or moderately complicated long term/chronic non-cancer and cancer pain conditions.

- \* Staff: doctors, nurses, secretaries, possibly a limited multidisciplinaryity.
- \* Teaching/educational obligations: own hospital for relevant groups of the staff.
- \* Research: no obligations.

### ***VI.1.2. Multidisciplinary Pain Centre***

Treatment unit for patients suffering from moderate to severe complicated long term/chronic pain conditions of non-cancer and cancer origin. Acute pain may or may not be part of the multidisciplinary pain centre.

- \* Independent treatment-, educational/teaching and research unit.
- \* Staff: multidisciplinary composed and consisting in doctors (the specific type of medical speciality is not crucial), psychologists, social advisers, nurses, physiotherapists, and secretaries.
- \* Furthermore as a minimum, attachment on consultative basis of relevant specialists within relevant medical specialities. This attachment accounts not only diagnostics and treatment, but also research, teaching and education.
- \* Teaching and education at all levels.
- \* Research:
  - \*\* Clinical research
  - \*\* Basic research
  - \*\* Quality insurance and development
- \* Independent outpatient clinic in own and suitable premises.
- \* Independent case record and archive systems.
- \* Collaboration with relevant international and national treatment, education and research institutions.

The criteria to fulfil the classification as a multidisciplinary pain centre may vary between the different Nordic countries. However, as a minimum multidisciplinary in handling patients, teaching and research must be present.

### ***VI.2. Classified pain units in the Nordic countries***

The list of classified units is preliminary. More units may be added depending on their ability to fulfil the above mentioned demands.

#### ***VI.2.1. Denmark***

The below mentioned multidisciplinary pain centres are all independent units and fulfil the international classification requirements.

The theoretical education will strictly be attached to specific established educational positions in the pain centres.

Specific descriptions of the departments which also will contain information on patient categories, research areas, teaching obligations etc. will be available from the Education Secretariat (see below).

##### ***VI.2.1.1. Classified multidisciplinary pain centres***

- \* H:S Multidisciplinary Pain Centre, Rigshospitalet, Copenhagen
- \* Multidisciplinary Pain Centre, Herlev Hospital, Copenhagen
- \* Multidisciplinary Pain Centre, Ålborg Hospital, Ålborg

##### ***VI.2.1.2. Classified palliative units***

- \* H:S Palliative Medical Department, Bispebjerg Hospital, Copenhagen
- \* Palliative Team, Århus County Hospital, Århus

#### ***VI.2.2. Finland***

##### ***VI.2.2.1. Classified multidisciplinary pain centres***

- \* Multidisciplinary Pain Centre, Helsinki University Hospital
- \* Multidisciplinary Pain Centre, Turku University Hospital
- \* Multidisciplinary Pain Centre, Oulu University Hospital

##### ***VI.2.2.2. Classified palliative units***

- \* Palliative Care Unit, Helsinki University Hospital
- \* Palliative Care Unit, Tampere University Hospital

#### ***VI.2.3. Iceland***

- \* Pain Clinic, Anaesthesia and Intensive Care Department, Landspítalinn, Reykjavík
- \* Pain Clinic, Reykjalundur Rehabilitation Centre, Mosfellsbær
- \* Palliative Medical Department, Landspítalinn, Kópavogur

#### ***VI.2.4. Norway***

##### ***VI.2.4.1. Classified Pain Clinics***

- \* Pain Clinic, Aker and Ullevål Hospital, Oslo
- \* Pain Clinic, Haukeland Hospital, Bergen
- \* Pain Clinics, Rikshospitalet and Det Norske Radiumhospitalet, Oslo
- \* Pain Clinic, Regional Hospital, Trondheim
- \* Pain Clinic, University hospital of northern Norway, Tromsø

##### ***VI.2.4.2. Classified Palliative Units***

- \* Section Palliative Treatment, Regional Hospital, Trondheim

#### ***VI.2.5. Sweden***

##### ***VI.2.5.1. Classified Multidisciplinary Pain Centres***

- \* Pain Centre, Karolinska Hospital, Stockholm
- \* Pain Centre, University Hospital, Uppsala

- \* Pain Centre, University Hospital, Lund
- \* Pain Centre, University Hospital, Gothenburg
- \* Pain Centre, University Hospital, Umeå
- \* Pain Centre University Hospital, Linköping
- \* Pain Centre, Regional Hospital, Örebro

#### **VI.2.5.2. Classified palliative units**

?

## **VII. The pain medicine specialist education program**

The education is designed for specialists in anaesthesiology who either have or are planning to have their daily work in pain clinics or multidisciplinary pain centres.

The purpose with the education is to supply the specialist with the knowledge and skills necessary to evaluate and treat patients suffering from moderately and severely complex long term/chronic non-cancer and cancer related pain conditions in addition to advanced knowledge and skills in handling acute pain.

The education consists of a theoretical and a clinical (training) part. The theoretical part will be identical in all countries and consists of joint courses as described below. Due to differences in the national health care systems the clinical part will vary from one country to another.

### **VII.1. Components in the specialist education**

The education consists in a theoretical and a clinical part and will last at least 24 months.

#### **VII.1.1 Clinical part of the education**

The clinical part of the education has duration of at least 3-6 months and is exchangeable between the Nordic countries, but must take place at a classified pain unit or a pain unit recognized by the educational board.

#### **VII.1.2. Theoretical part of the education**

##### **VII.1.2.1. Courses**

Five theoretical courses lasting 3 days will be arranged in the different Nordic countries (se Addendum 1) The courses will cover the proposals made by IASP (International Association for the Study of Pain) in their "Core Curriculum for Professional Education In Pain" (11).

##### **VII.1.2.2. Additional education activities**

Participation in at least two national/international pain meetings/symposia or congresses of high quality (approval by the Educational Board may be needed).

### **VII.2. Diploma**

After having finalised both the clinical and the theoretical part of the education a SSAI Diploma in Advanced Pain Medicine (Algology) will be obtainable. To obtain the diploma the applicant has to deliver a written survey on a specific subject approved by the education committee.

## **VIII. Theoretical courses**

The courses will cover the proposals made by IASP (International Association for the Study of Pain) in their "Core Curriculum for Professional Education In Pain" (11).

As the education in the first hand is directed against anaesthesiologists a special course in acute pain has been added.

The courses will be arranged by the national educational representatives and will take place in the different Nordic countries.

The courses will consist of interactive seminars and problem orientated teaching with emphasis on active participation by all participants.

### **VIII.1. Courses /topical seminars**

The following courses are planned. However, the outline of topics may be adjusted.  
The courses will each last 3-4 days.

#### **VIII.1.1. Sweden**

Organiser: Torsten Gordh, Uppsala  
Staffan Arnér, Stockholm  
Steven Butler, Uppsala

Day one: Introduction course

Day 2-4: Topics: Acute pain

- Transition from acute to chronic pain: theory and clinic
- Similarities and differences between acute and long term/chronic pain
- Pathophysiology of acute pain
- Methods of acute pain management
- Use of invasive techniques
- Postoperative and posttraumatic pain
- Pain in the ICU
- Paediatric pain
- Obstetric pain
- Outcome evaluation
- Research in acute pain

#### **VIII.1.2. Finland**

Organisers: Eija Kalso and Per Rosenberg

Topics: Pharmacological pain management: non-opioids  
Pharmacological pain management: opioids  
Pharmacological pain management: secondary analgesics  
Rheumatologic aspects  
Ethical standards for pain management and research  
Animal models and ethics

#### **VIII.1.3. Denmark**

Organisers: Jørgen Eriksen and Niels-Henrik Jensen

Topics: Epidemiology and ethiology of pain  
Multidisciplinary pain management  
Psychosocial aspects in pain  
Psychiatric evaluation and treatment  
Compensation, disability and work related pain  
Cancer related pain  
Outcome evaluation

#### **V.III.1.4. Norway**

Organisers: Harald Breivik and Petter Borchgrevink

Topics: Anatomy and physiology/pathophysiology of pain  
Design, reporting and evaluation of clinical studies  
Myofascial pain  
Neuropathic pain  
Orofacial pain  
Paediatric pain

#### **V.III.1.5. Iceland**

Organisers: Gudmundur Björnsson and Bjarni Valtýsson

Topics: Measurement of pain  
Principles of pain evaluation and management  
Outcome  
"Low back pain"  
Physiotherapy and rehabilitation  
Invasive and non-invasive neurostimulation  
Nerve blocks and other types of blocks

#### **V.III.2. Number of participants**

Below the maximal number of participants from each Nordic country

Denmark: max. 5

Finland: max. 5

Norway: max. 5

Iceland: max. 2

Sweden: max. 8

#### **IX. Economy**

The departments responsible for the clinical part of the education will also be responsible for the expenditures in connection with the theoretical courses and supplementary costs in connection with the mandatory seminars, symposia and congresses (see VII.1.2.2. Additional educational activities).

A total cost of about DKR 6.-8.000 per course is calculated. In addition there will be expenditures in connection with travels and accommodation.

#### **X. Announcement**

Announcements will take place in *Acta Anaesthesiologica Scandinavica* and in the national anaesthesiological journals.

#### **XI. Educational chair and course secretariat**

Chairman for the educational board: Petter Borchgrevink

Secretary: Jørgen Eriksen

Secretariat:

H:S Multidisciplinary Pain Centre

Dept. 7612, Blegdamsvej 9

DK-2100 Copenhagen Ø

Denmark

Phone: + 45 3545 7382

Fax: +45 3545 7349

e-mail: jeriksen@rh.dk

## **XII. References**

1. Behandling af långvarig smärte. SoS-report 1994:4
2. Bonica JJ. The Management of Pain. Philadelphia: Lea & Fibiger, 1953.
3. Epidemiology of pain. IASP Press, Seattle WA, USA 1999.
4. Becker N, Thomsen AB, Sjøgren P, Beck P, Eriksen J. Pain epidemiology and health related quality of life in chronic non-malignant pain patients referred to a Danish multidisciplinary pain centre. *Pain* 1997; **93**; 393-400.
5. Loeser JD. Economic implications of pain management. *Acta Anaesth Scand* 1999; **43**: 957-959.
6. Højsted J, Alban A, Hagild K, Eriksen J. Utilisation of health care system by chronic pain patients who applied for disability pension. *Pain* 1999; **82**: 275-282.
7. Ektor-Andersen I, Janzon L, Sjölund B. Chronic pain and the sociodemographic environment: Results from the pain clinic at Malmö General Hospital in Sweeden. *Clin J Pain* 1993; **9**: 183-188.
8. Sjøgren P, Banning AM, Jensen NH, Jensen M, Klee M, Vainio A. Management of cancer pain in Denmark. *Pain* 1996; **64**: 519-525.
9. Loeser JD. Desirable characteristics for pain treatment facilities: Report of the IASP task force. In: Bond et al (eds.) Proceedings from the VIth World Congress on Pain
10. Standard for smertebehandling for anæstesiologer i Norge: Norsk Anæstesiologisk Forening, Generalforsamlingsdokument.
11. Core Curriculum for Professionel Education in Pain. Fields HL (Ed.) IASP Press, Seattle WA, USA 1998