



Editorials: Epidemiological Recording System for the Danish Child Dental Services

Poul Erik Petersen

To cite this article: Poul Erik Petersen (1987) Editorials: Epidemiological Recording System for the Danish Child Dental Services, Scandinavian Journal of Primary Health Care, 5:3, 131-132, DOI: [10.3109/02813438709013991](https://doi.org/10.3109/02813438709013991)

To link to this article: <https://doi.org/10.3109/02813438709013991>



Published online: 12 Jul 2009.



Submit your article to this journal [↗](#)



Article views: 48



View related articles [↗](#)

RS-virus was found to be the main etiological agent when nearly two thousand samples of nasopharyngeal secretion (NPS) from *children hospitalized with acute respiratory disease* were investigated. Influenza, mainly type A-virus, was detected in a few circumscribed outbreaks, and parainfluenza-virus and adenovirus only appeared with low incidences in this material.

Influenza, both type A and type B, were the main etiological agents when nearly two hundred samples of NPS were obtained from *patients (all ages) treated for acute respiratory disease in general practice*. *RS-virus* was detected in a small number of cases concurrently with influenza outbreaks. Parainfluenzavirus and adenovirus were detected with low incidences also in this material.

Conclusively, rapid diagnostic tests (FA- or ELISA-technique) for the detection of influenza-virus and *RS-virus* should be available on request

for selected groups of patients treated in general practice. These tests should preferably be available during the period from December to March, when these two viruses most frequently appear as epidemics in Scandinavian countries.

Influenzavirus, especially type A, as well as *RS-virus* may produce life-threatening infections in certain risk groups of patients (e.g. chronic cardiopulmonary disease, immunosuppressed patients, immunodeficiencies and other congenital disorders). Chemotherapeutic intervention with amantadine (for influenzavirus type-A infections) and ribavirin (for *RS-virus* infections) is now possible.

Allan Hornsleth
Department of Clinical Virology,
Institute of Medical Microbiology,
University of Copenhagen.

Epidemiological Recording System for the Danish Child Dental Services

The Danish Act on Child Dental Health came into force in August 1972. It imposes on the municipalities the responsibility of providing free preventive and therapeutic care for all children 0-16 years of age. In pursuance of the Act, the National Health Service developed a recording system for the Child Dental Services. This system has been established in order to provide dental data essential for the evaluation and planning on both a regional and a national basis. In brief, the system is based on registrations of all children receiving public dental care. The clinical findings made at the systematic dental examinations are recorded on special forms in duplicate. All dentists have received detailed instructions concerning the criteria for registrations and the procedure for recording the observations. It is convenient for the examining dentist to dictate the findings to an assistant who has been trained in writing the symbols used. The original record form serves as a direct computer input for optical scanning and statistical analysis. Computer processing utilizes Optical Character Recognition (OCR) which permits handwritten characters to be read. The duplicate form provides a supplement to the patient's records to assist in planning of dental care for the individual child. Data on 1) dental caries

status, 2) dental plaque and gingivitis, 3) oral mucosal diseases, etc., 4) malocclusions, and 5) identification data are collected.

The recording system is based upon a relatively simple methodology and standardized criteria for registration. The costs of the system have been estimated to less than one per cent of the mean annual costs of the dental care per child. Annually, summary statistics for the whole country are published by the National Health Service, with the children categorized according to school grade and possibly age. Furthermore, the statistics derived from the individual dental services are made available to the municipalities. Thus, the annual documentations which provide information on the prevalence of dental caries, dental plaque and gingivitis, and malocclusion frequencies form a valuable basis for evaluation and planning of the Child Dental Services. Of importance to the general health service and the primary health care system is that this recording system has been widely accepted by the professionals as well as health planners. This is due to the facts that collection of epidemiological data has been integrated with the patient record system, the use of the patient record form is rational and relevant in planning of individual dental care, the

registrations are not time consuming, and that the epidemiological data are meaningful to the planning and evaluation of health care at a local level.

In addition to this, the epidemiologic data base has been a valuable tool in health services research. A reduction in the prevalence of dental diseases among children has been observed during the last 10-15 years and nowadays dental caries tends to concentrate to the so-called risk groups. In a following paper (p. 169) the relevance of the recording

system in health services research is clearly demonstrated. The progression and the pattern of dental caries among risk groups are described and the possibilities of screening risk children in a Danish municipality are evaluated.

Poul Erik Petersen
Associate Professor
dr. odont. & cand. art. soc.
Denmark

Radioactive Iodine Treatment of Hyperthyroidism

Radiiodine treatment of hyperthyroidism is a simple and economical method of treatment. It produces the ablative effects of surgery without any immediate operative and postoperative complications. The principal disadvantage attendant on the use of radioiodine is the rather high frequency of hypothyroidism. Previously there was concerns that this form of therapy might produce thyroid carcinoma, leukemia or genetic damage, but more than 35 years experience with the treatment does not confirm this suggestion.

There is little doubt that the beneficial effect of radioiodine depends upon radiation-induced destruction of the thyroid parenchyma. Within the first few weeks after treatment there occurs epithelial swelling and necrosis, disruption of follicular architecture, edema and infiltration with leucocytes (radiation thyroiditis). Resolution of the acute inflammation is followed by fibrosis and lymphocytic infiltration. A functional abnormality after treatment is the defective organic binding of thyroid iodine. This is illustrated by the perchlorate discharge test, which often is abnormal.

The main side-effect of radioactive iodine treatment of hyperthyroidism is the high incidence of myxoedema, which occur with an increasing rate of approximately three per cent every year, dependent on the dosis of radioiodine used and type of goitre. In the material published in the paper by Falkenberg et al. in this issue the results of radioactive iodine treatment of 269 patients with hyperthyroidism are given; 29.7% had diffuse toxic goitre, 42% multinodular toxic goitre and 28.3% toxic adenoma. In these three groups 57.5%, 10.7% and 23.9% had myxoedema five years later. The dose was about 330 mBq (10 mC), but varied considerably. The incidence of hypothyroidism was independent of the dose given. Altogether 28.3% developed hypothyroidism in the five-year-period. Only two patients developed recurrence of hyperthyroidism.

In a Danish study from Copenhagen (1) with an observation time of five years two groups of patients were compared; 248 patients received radioactive iodine treatment alone, 132 patients received combination therapy with radioactive iodine and carbimazole. In the first group 18% developed hypothyroidism and in the second group 7%. No patients with toxic adenoma developed hypothyroidism in the two groups. The reason for the significant difference between the two groups may be a lower absorbed radiation dose caused by a carbimazole-induced blockage of recirculation of ^{131}I . The average dose of ^{131}I was about 220 mBq (6 mC) in both groups, but it was necessary to give 50% of the patients more than one dose with two to three months interval. The combination therapy has the major benefit of rendering the patients biochemically euthyroid within three weeks and keeping the patient euthyroid during the whole period of therapy.

Radioactive iodine treatment of hyperthyroidism is specially indicated in cases with toxic solitary adenoma, in patients with multinodular toxic goitre, and in patients with recurrences after medical antithyroid longtime treatment and recurrences after surgery. In these groups of patients longtime medical treatment has a high frequency of relapse.

In many centers thyroid surgery is only recommended in cases with big goitres and in cases with suspicion of malignancy.

REFERENCE

1. Blidahl H, Mölholm Hansen J, Rogowski P, et al. ^{131}I -treatment of diffuse and nodular toxic goitre with or without antithyroid agents. *Acta Endocrinol* 1982; 99:517-21.

Thorkild Friis
Fredriksberg Hospital
Denmark