Deutsche Gesellschaft für Zahn-, Mund- und Kieferheilkunde Deutsche Gesellschaft für Rechtsmedizin



INTERDISZIPLINÄRER ARBEITSKREIS FÜR FORENSISCHE ODONTO-STOMATOLOGIE



GERMAN ACADEMY OF FORENSIC ODONTOSTOMATOLOGY

Organ des Interdisziplinären Arbeitskreises für Forensische Odonto-Stomatologie der Deutschen Gesellschaft für Zahn-, Mund- und Kieferheilkunde und der Deutschen Gesellschaft für Rechtsmedizin A publication of the German Academy of Forensic Odontostomatology of the German Society of Dental Oral and Craniomandibular Sciences and the German Society of Legal Medicine ISSN 0947-6660



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Lectori benevolentissimo salutem dicit

GÖSTA GUSTAFSON AWARD 2004



GÖSTA GUSTAFSON (16. April 1906 – 20. Oktober 2001)

Der Tod ist der Beginn der Unsterblichkeit (Robespierre)

GÖSTA GUSTAFSON AWARD

Preis des Arbeitskreises für Forensische Odonto-Stomatologie (AKFOS)

Der Arbeitskreis für Forensische Odonto-Stomatologie der Deutschen Gesellschaft für Zahn-, Mund- und Kieferheilkunde und der Deutschen Gesellschaft für Rechtsmedizin hat 2002 einen nach Professor GÖSTA GUSTAFSON benannten Preis ins Leben gerufen.

Der Gösta Gustafson Award wird vom Vorstand des Arbeitskreises in Anerkennung der Verdienste um die forensische Odonto-Stomatologie vergeben.

Die Veröffentlichung der mit dem Gösta Gustafson Award ausgezeichneten Persönlichkeiten wird von der DGZMK gefördert.

Beurteilung

Die eingereichten Vorschläge werden vom Vorstand des Arbeitskreises gesammelt und beurteilt. Dessen Beurteilung wird vom Vorsitzenden des Arbeitskreises dem Vorstand der DGZMK unterbreitet. Nach Feststellung der Übereinstimmung mit den Richtlinien über die Vergabe des Preises wird vom Vorstand des Arbeitskreises über die Preisvergabe entschieden. Die Entscheidung des Vorstandes ist endgültig. Der Rechtsweg ist ausgeschlossen.

Richtlinien für den Gösta Gustafson Award

Der Gösta Gustafson Award des Arbeitskreises ist eine Auszeichnung für die beste wissenschaftliche Arbeit auf dem Gebiet der forensischen Odonto-Stomatologie. Mit der Preisvergabe ist keine finanzielle Dotierung verbunden. Er dient einzig der Ehrung der Preisträger.

Die Auszeichnung wird aller zwei Jahre auf der Jahrestagung des Arbeitskreises verliehen:

1. an Personen, die für die forensische Odonto-Stomatologie herausragende Leistungen erbracht haben,

2. an Autoren/Autorengruppen, die mit ihren Beiträgen/Publikationen einen hohen wissenschaftlichen Beitrag zum Ansehen der forensischen Odonto-Stomatologie leisten.

Das Preisrichterkollegium besteht aus dem Vorstand des Arbeitskreises.

Der Vorstand beschließt mit einfacher Mehrheit den oder die Preisträger.

Dr. med. Dr. med. dent. Klaus Rötzscher, 1.Vorsitzender S

Speyer, Januar 2002

GÖSTA GUSTAFSON AWARD

After contacting Anna-Greta Gustafson and getting her acceptance, in 2002 the German Academy of Forensic Odonto-Stomatology (AKFOS) of the German Society of Dental Oral and Craniomandibular Sciences (DGZMK) and the German Society of Legal Medicine (DGRM) called to existance an award named after Professor GUSTAFSON.

Aim of the Award

The Gösta Gustafson Award is granted biennial by the board of the German Academy of Forensic Odontostomatology (AKFOS) as acknowledgement and appreciation of the best scientific work submitted in the area of Forensic Dentistry.

This should emphasize the scientific importance of Forensic Dentistry.

The publication of persons given the GÖSTA GUSTAFSON AWARD is taken over by the German Society of Dental Oral and Craniomandibular Sciences (DGZMK).

Evaluation

Suggestions are collected by the board of AKFOS. Their evaluation is submitted by the chairman of AKFOS to the board of directors of the DGZMK. If the offered suggestions are in accordance to the guidelines of this award the board of AKFOS agrees on the winner of the award.

The decision of the board is final. The course of law is impossible.

Guidelines for the award of AKFOS

The award of the German Academy of Forensic Odontostomatology is an appreciation for the best scientific work in the area of forensic dentistry. The award excludes prize money. The award is given as an honorary price.

The award is granted every two years during the meeting of AKFOS:

- 1. for scientists, who were working for the acknowledgement and the success of forensic odontology,
- 2. for the best publication of the year.

The committee of adjudicators for this award consists of the board of AKFOS. The board elects the winner(s) with simple majority. The suggested person may be from Germany or abroad.

Professor Gösta Gustafson acclaimed internationally as one of the foremost pioneers of the discipline, and founding father of IOFOS.

In Absprache mit Anna Greta Gustafson wurde der Gösta Gustafson Award vom Arbeitskreis im Jahre 2002 inauguriert und konnte erstmalig in Montpellier anlässlich des 16. Meeting der International Association of Forensic Sciences (I.A.F.S.) und der International Organization for Forensic Odonto-Stomatology (I.O.F.O.S.) verliehen werden.

GÖSTA GUSTAFSON AWARD 2002

Als Preisträger wurden Prof. Tore Solheim, Norwegen (re.)

und

Prof. Cyril J Thomas, Australien (li.) ausgezeichnet.

(Photo mit frdl. Genehmigung von Dr. Guy Willems)



The award was given to Prof. Cyril Thomas and Prof. Tore Solheim at the IOFOS meeting in Montpellier 2002 by Dr. Klaus Rötzscher.

The award was given to Prof Cyril J Thomas, Australia, for his conscientious and faithful service as editor of Journal of Forensic Odontology. Cyril J Thomas was born and educated in South-Africa and is a specialist in prostodontics. After moving to Australia he was appointed editor of what was from then on to be the official journal for IOFOS. The journal is now refereed, fully indexed and found in many of the large databases. It is thanks to Professor Thomas that it has been established as a quality international scientific journal which is published regularly twice a year. After 15 years as editor he has announced that he wants to retire.



Dear Klaus, it was a great pleasure to meet up with you and so many dear and old friends and colleagues at the IAFS/IOFOS meeting in Montpellier. The highlight would of course be the awarding of the first Gustafson Award of AKFOS to Tore Solheim and me. I am personally very touched and humbled by this recognition from such a substantial group of peers and am gratified that what one does for the love of one's profession can be acknowledged in such an appropriate and tangible way. I thank you and AKFOS most warmly for the award and will treasure the handsome presentation always. Please convey my sentiments to your members. CJ Thomas, BDS Hdip Dent PhD, Associate Professor and Pro-Dean, Westmead Centre for Oral Health, Darcy Road, Westmead NSW 2145, Australia, 10th September 2002.



The award was given to Prof. Dr. odont. Tore Solheim for his many scientific publications in the field of forensic odontology. He was born and educated in Norway. Tore Solheim is professor of pathology at the Department of Pathology and Forensic Odontology, University of Oslo, Norway. He was responsible for the dental identification in several mass accidents. His main interest has been age changes in teeth, which was also the topic for his doctoral thesis in odontology.

He has been chairman of the Norwegian Society for Forensic Odontology (NSFO) for several terms and he is the present president of IOFOS (2002-2005).

GÖSTA GUSTAFSON AWARD 2004

The award as an appreciation and acknowledgement for identifying the victims of the large disaster on September 11, 2001 is given to the members of the New York City Medical Examiner's Dental Identification Team with respect to the success of forensic odontology advancing Forensic Dentistry in the United States.

Members of the NYC World Trade Center Dental Identification Team

Jeffrey Burkes DDS Kathleen Agoglia DDS Donald Aleksandravicius DDS Kenneth Aschheim DDS Haskel Askin DDS **Dorline Bosboom DDS** Stephen Bove DDS Konstantinos Cherpelis, DDS Sheila Dashkow DDS Steven DeCrescenzo DDS John Demas DDS Lawrence Dobrin DMD Henry Dondero, DDS Linda Edelson-Slocum DMD Vincent Funaro DDS Howard Glazer DDS

James Hudson DMD Mitchell Kirschbaum DDS Eugene LaSota DDS Daniel Levitt DDS Richard Lewenson DDS Brian Margolis DDS Matthew Neary DDS Frank Pappas DDS R. Chester Redhead DDS Harvey Silverstein DDS Charles Solomon DDS Roy Sonkin DDS Richard Weledniger DDS Winnie Furnari RDH,BS Mona Itkowitz RDH

DENTISTRY'S RESPONSE TO WTC 9/11 By Howard S. Glazer, DDS

Shortly after the terrorist attack on the World Trade Center's twin towers on the morning of September 11, 2001, Dr. Jeffrey Burkes, the Chief Forensic Dental Consultant to the Office of Chief Medical Examiner, City of New York (OCME), put a call out to his team members. Within hours, the most senior members of the consultant staff had assembled and were ready to aide in the identification process.

Dr. Burkes leads a core group of 31 individuals who are "on-call" to the OCME 24 hours/day, 7 day/week, 365 days/year. The Dental Identification Unit (DIU) includes dentists representing all specialties, hygienists, assistants, and auxiliary personnel. This is a highly skilled and experienced group of professionals, many of whom participated extensively in forensic training exercises, teach related courses, and have worked together during prior multiple fatality incidents. On a routine basis, many of the dentists are involved in civil and criminal cases including the identification of human remains, documenting child abuse injuries, bite mark analysis, and providing expert testimony in court. Those involved in the DIU attend meetings and training sessions throughout the year to keep them "ready for action" should such a situation arise.

In the 9 months following September 11th, team members put their private practices and personal lives "on hold" to undertake the grueling task of identifying the WTC victims, in addition to those who perished in the crash of American Airlines Flight 587 in November 2001. Members of the team performed post-mortem examinations, taking and processing x-rays, and the arduous task of assembling and recording ante-mortem records.

Under the supervision of Dr. Burkes, Tour Commanders were responsible for daily operations that included the management of personnel, identification of remains, computer tracking of ante and postmortem records and quality assurance. The following individuals served as Tour Commanders during the operation: Drs. Kenneth Ascheim, Kathleen Agoglia, Donald Aleksandravicius, Haskel Askin, Dorline Bosboom, Stephen Bove, K. Dean Cherpelis, Sheila Dashkow, Steven DeCrescenzo, John Demas, Lawrence Dobrin, Henry Dondero, Linda Edelson-Slocum, Vincent Funaro, Howard S. Glazer, James Hudson, Mitchell Kirschbaum, Eugene LaSota, Daniel Levitt, Richard Lewenson, Brian Margolis, Matthew Neary, Frank Pappas, R. Chester Redhead, Harvey Silverstein, Charles Solomon, Roy Sonkin, and Richard Weledniger, all of whom all served tours on a rotational basis.

The Tour Commanders were responsible for all voluntary personnel and those members from Disaster Mortuary Operation Response Team (DMORT). DMORT personnel are members of what was then the Department of Health and Human Services, who were brought to New York City to assist and support the OCME's Dental Identification Unit.

Tour Commanders could not function without the support of those performing admirably in administrative positions. Many Dental Hygienists, assistants and technicians who were capable members of the team participated in the identification process by assisting the forensic dentists. Many of these team members were also members of the New York Society of Forensic Dentistry and served alongside the dentists in the ante and postmortem sections. The two senior members who were responsible for the office administration were Winnie Furnari, RDH, BS and Mona Itkowitz, RDH.

During what was a most difficult time for all, the constant ringing of the phone with requests to volunteer by so many dentists, hygienists, assistants, and other members of the dental "family," was most welcome and heartwarming. Four hundred and fifty-seven individuals passed through the dental unit in the nine months of operation. While the supportive role of DMORT was invaluable, the willingness of so many others locally and nationally who volunteered was equally valuable and much appreciated.

The OCME's DIU is proud and privileged to have been able to assist in the identification process by charting and identifying 525 victims by dental means. Members of this unit stand ready to again assist in any multiple fatality incident should the need arise. And, if asked to respond, they will once again perform their functions in a dignified manner, diligently, professionally, and with honor.

The award as an appreciation and acknowledgment for creating the *WinID3* computer program is given to James McGivney, DMD, who closely worked with the WTC Medical Examiner's Dental Identification Team consistently changing his program to meet the needs of the large 9/11 disaster, with great merits with respect to the international success of forensic odontology.

Dr. James McGivney is a member of DMORT team 7.

WinID3

presented by James McGivney, DMD, Saint Louis University

WinID is the dental computer program used by the US Government's DMORT (Disaster Mortuary Operational Response Team) teams.

The DMORT teams are the mortuary services and identification response units of the Federal Emergency Management Agency (FEMA).

The current version *WinID3* was first released and used in New York City at the World Trade Center disaster.

Previous versions were used at the Amtrak crash in Bourbonnais, IL, the Korean Air crash in Guam, the Alaska Air crash in Ventura, CA, the Egypt Air disaster and the crash of a computer plane in Quincy, IL.

The program matches dental characteristics of antemortem and postmortem records to produce a ranked list of possible dental identifications. The operator can view the "best-matched" information on a number of different screens that allow side-by-side comparison of dental chartings, graphics or descriptive information.

WinID also allows matching of non-dental characteristics such as age, sex, race and blood type. Space is available for disaster specific data to be entered, stored and queried.

WinID3 was developed to serve two functions: as a tool to the aid worker in mass disasters and as a system to develop, implement and maintain a database of missing persons and unidentified bodies.

The program is written in Visual Basic. *WinID3* makes extensive use of graphics. Graphics of dental radiographs are the most commonly viewed image, but any object that can be captured by a digital camera or scanner can be viewed.

The program uses a Microsoft Access database and runs under most Windows platforms.

Currently English, French, German and Spanish language editions are available. Italian is expected in the near future.

The Air Disaster at Lake Constance

by Claus Grundmann, Moers

A summer holiday in Spain – what a joy for 49 Russian kids and their families. But this joy was suffocated by sudden death; none of the children reached their holiday destination. Their plane collided with an air freighter for reasons unknown so far at the water's edge of Lake Constance and fell to the ground like a fireball. German dentists were called to this place of accident, too, to identify the dead.

The accident

The collision between a Russian Tupolev TU-154 of Bashkirian Airlines and a cargo plane Boeing 757 of DHL happened near Uberlingen at Lake Constance on July 1, 2002, shortly before midnight. The Russian plane was on its way from Moscow to Barcelona. Its passengers were mainly children, adults and persons who were to look after them. The cargo plane was on its way from Bahrain to Brussels. On board were only the pilot and his copilot. Altogether there were 71 dead, and their corpses were found scattered within the environs of 10 kilometres. Most of them were found soon except for the last two corpses, who were only found six days later in an almost impassable area.

The identification

The identification of unknown dead bodies by forensic odontologists has a long tradition because of the great diversity of individual features and a relative indestructibility of the teeth. Events like the train disaster of Eschede, of the Concorde crash near Paris as well as the terrorist attack on the World Trade Center in New York have focussed the public's attention on the issue of identification once again. Germany's code of criminal procedure (§88 StPO) in connection with further administrative rules (guidelines in criminal and monetary fine proceedings, No. 33) stipulates the ascertainment of identity of unknown dead bodies and thus of victims of mass disasters. The post mortem examination of an unknown person includes the search for distinguishing marks for identification. Yet of special importance for the identification of corpses are fingerprints and the recording of odontological results. From a scientific point of view, there are reliable (fingerprints, dental status and DNA) and unreliable (age, gender and height) marks of identification. The comparable data, which are necessary for the identification of disaster victims, are collected on an Interpol form. After the completion of the necessary examinations and the comparison of ante-mortem (A-M) and post-mortem (P-M) documents forensic experts, forensic odontologists, biologists and CID officers establish whether or not a disaster victim has been identified without doubt. Finally the CID officer in charge certifies the identity of the dead person. In the Lake Constance

disaster the Federal Bureau of Crime Investigation (BKA) in Wiesbaden (Bundeskriminalamt) was asked for assistance and made available their DVI team of 30 specialists, which was called into existence in 1972.

They were deployed in different areas of responsibility:

securing of exhibits (jewellery, personal objects), fingerprint analysis, documentation and evaluation by comparison of the data collected and made available.

The interdisciplinary team

After recovering the corpses found were transported at first to a tunnel and then to the Pathological Institute of the Municipal Hospital of Stadt Friedrichshafen, where forensic experts of the universities of Tübingen and Heidelberg as well as dentists of the BKA Identification Commission (IdCo) carried out the necessary examinations.

The assistance of families

The next of kin of most of the victims arrived from Ufa, their hometown, on July 3 and 4, 2002, to be near their beloved deceased.

The families were not allowed any contact with the bodies. CID officers and interpreters questioned the relatives, using the Interpol form. The relatives of the victims provided numerous pieces of information concerning special characteristic features of their deceased, which sped up or rather enabled identification. On the initiative of the BKA and in connection with the BKA relation officers in Moscow the relatives were asked to bring as many available documents as possible for comparison reasons. Thus the forensic odontological task force there opened up numerous documents: details concerning tooth and jawbone malposition, gaps between the teeth, dentures (crowns and dentures), removable orthodontic pieces of apparatus that had been worn until recently, etc.

Plaster models of orthodontical treatments, single X-ray photographs, panorama X-ray photographs (OPG's), X-ray photographs made by RadioVisioGraphy (RVG), results of former patients' dentists, dental schools and clinics, and industrial medical examinations of flying staff, bills of dentists and so on had come in.

The collection of data from the children's teeth

After the post mortem examination by forensic experts the collection of results from teeth was carried out.

For this reason upper and lower jaws (which were fractured as a rule) were extracted (the upper jaws were extracted in a retro-molar way, the lower jaws were severed at the angle of the jaws).

Then the collection of dental data was carried out under optimal lighting conditions. Furthermore the stage of root growth according to DEMIRJIAN was examined to establish the age of corpses. The results were recorded and filed on the Interpol forms.

During the first three days 69 out of 71 corpses could be examined by the IdCo. The last two corpses were only found after another three days and then submitted to the commission.

The first identification was carried out on the second day after the disaster had occurred. Further identifications followed especially on the third and fourth day, with further comparative documents from Russia now being available for evaluation. These A-M documents were of differing quality and had to be translated by interpreters, as far as they were not X-ray photographs or plaster models.

All the collected informations were transferred into fictional A-M patient files, which were later compared with P-M files. In this way by analysing dental data and by the

support of personal description, jewellery and / or clothing 46 percent of the aircrash victims could be identified within a few days. Identification was possible in 28 percent of all the cases by the evaluation of personal description, jewellery and / or clothing only.

DNA analyses (which were available only some time later) enabled identification of another 20 percent of the dead bodies. Six percent of the disaster victims could be identified by a combination of all these methods.

The advantage of identification by forensic odontologists is to be seen in a fast ante mortem and post mortem comparison of dental data. In relation to fast identification similar success records can be achieved by analysing conspicuous clothing and remarkable jewellery in connection with personal description.

Conclusion

Within only few days a highly motivated team of 30 BKA experts succeeded in identifying 71 air disaster victims, who crashed from an altitude of 11.500 metres at the north-eastern water's edge of Lake Constance in the night of July 2, 2002.

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Jurisprudence - What is going on? by Yvo Vermylen, Belgium

Claims against dentists

The number of claims against dentists has grown in the last decade. Dental implantology, dental prosthesis, maxillo-facial surgery, orthodontics, periodontology and endodontics are the most recurrent fields in which claims are made.

Fifteen years ago we were still confident that we would never reach the amount of claims as it was in the USA.

There were a number of good reasons:

European jurisdiction has no jury, but professional judges to deal with the question of proof and that is still the case

The contingent fee system: the lawyer gets a certain percentage of the recovered damages if the case is won and nothing if the case is lost. This rule was considered unethical in Europe, but we see that that system will be introduced in the Netherlands, and probably other countries will follow.

Europe has a very good social security system, but we see that, because of a lack of money and because of the technological evolution in medicine, the governments are nibbling on the percentage of the Brute National Product that goes to health care. A lot of high tech treatments is no longer covered by general insurance and in the near future we will see a growth of private insurance to cover these expensive treatments. That will have consequences and we may expect that these private insurance companies will offer different packages of medical care. That will introduce Europe into the same situation as the USA, with a lot of people that cannot afford the fees.

We were convinced that the American was more claim-minded than the European, but since the introduction of legal-aid insurance we see a growing number of cases.

Legal aid insurance makes it easier for the victim of malpractice to institute a claim against the medical practitioner: The insurance covers the cost of the procedure, the fee of the lawyers and the fee of the dental expert. More and more specialized Legal firms in medical jurisprudence are established and the business is flourishing.

The "res ipsa loquitur rule" in the USA did not exist in Europe - That rule says that the burden of proof will be reversed and will go to the defender if it is obvious that no other thing can have caused the injury (E.g. if a pair of scissors is discovered in the belly of a patient, who has had an operation, then it can be assumed that they were left behind in the patients belly during that operation) There are some conditions that have to be fulfilled before this rule can be applied:

The damage should be of such a specific nature that it does not happen without someone's fault

The defender must be in exclusive control of the person or the object

There may not be a spontaneous action or reaction of the plaintiff.

But we see similar rules in Europe:

In Germany we have the "Anscheinsbeweis", which allows parties to proof the case based on suspicions. Typical causes generate typical consequences, which can be supposed based on experience and without further proof.

The European patient is now much more aware of his rights then before.

We also see a depersonalization in the medical treatment: more and more dentists are specialized, every patient is considered to be a case, the expectations of the patients are much higher in the outcome of the treatments and that has also consequences on the number of the claims.

We see now cases that we have never seen before

The case with the overlooked decay

The case with the damage to the palatal surface of the upper front bridge Bring the case to Court or out of court sottlement?

Bring the case to Court or out-of-court settlement?

Most cases of malpractice are still handled in Court, unless it is obvious that the case cannot be won at all.

We all know that a procedure before the Court is very time-consuming and very costly.

Case of implants, lifting of the sinus, neurologic blocking of the Ganglion of Gasser, peri-implantitis, non fitting dentures

What are the alternatives :

insurance companies have dental advisors, who have to judge the cases and to calculate the damage. They also decide if there is liability of the dentist, judging the fault from a scientific point of view and in many cases they will also give advice in the way that the case should be settled. A lot of cases is solved in this way.

Another possibility is the amicable settlement (German - Gütlicher Vergleich), in which the two parties and their dentists come to an agreement. If they don't a third expert can be appointed to decide the case as far as the medical implications are concerned. This is a procedure that can be compared to a court procedure, but it is faster and less costly - no lawyers, only the costs of the experts, no cost for the procedure.

New is "mediation". This comes over from the USA and experiments are already going on in the Netherlands and Belgium.

In this form of settlement, both parties come together voluntarily with the mediator. That person is someone who is trusted by both parties and he is not bound by rules (as is the case in a court procedure or in an amicable settlement). He can talk separately with the parties, listen to their arguments, bring together the points of view and find a compromise that, if it is agreed upon, can be put in a legal agreement. This form of settlement is already used a lot in industrial circles to avoid the procedure of arbitration (in which an arbitrator settles a case, not only from the scientific point of view, but also legally - an arbitration is a substitution of a court procedure)

I think it is promising and it may lead to a better settlement on condition that parties are willing to discuss all the aspects of the case (which means that they are still on speaking terms) and that they can find a mediator that has the trust of both parties. If the mediation is not successful, court procedures are still open, because a mediation is voluntarily and not-binding. The first rule in a mediation procedure is that all that has been said in this procedure cannot be used in further procedures.

Scandinavian countries have adopted the "no-fault insurance" and that system seems to work very well. It is based on an insurance that covers the costs of restoration of the person into his previous condition. It does not cover the complete costs, but only an agreed cost per treatment. It does not always include esthetic or moral damages.

Furthermore there is always a franchise that differs from country to country. The system is only accessible if the damage is abnormal and when it is made clear that the damage could have been avoided if another treatment or a better way of treatment was available.

Some other countries, including Belgium, have been discussing this type of damage compensation, but so far without result. The main reason is that our jurisdiction is still based on the principle of fault and some authors don't want to accept an agreed cost for medical purposes, because it will always leave the victim in a losing position.

Guidelines in dentistry and liability

The American Institute of Medicine defines practice guidelines as: systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances

Guidelines can be very practical. It establishes the standards of care and every dentist knows what he should do in these specific circumstances. IOFOS has issued guidelines for good forensic practice and these have been published on the IOFOS website. Some of these guidelines are compulsory, others are recommendations.

Dental associations are not completely happy with this evolution, because guidelines are a limitation of dental autonomy and it may lead to more claims. If a practice guideline is not followed by the dentist, the risk of a claim increases.

If the dentist is brought to court in a specific case and if he didn't follow the guidelines, he will have to prove that his deviation of the guideline was not a fault and that he had good reasons to do so. This is a reversal of the burden of proof. He then has to proof that he was acting as a good dentist

Informing the patient

About treatment risks

<u>Belgium</u>: there is a shift from the theory of normal and foreseeable risks to risks that are relevant for the patient. This material risk theory is patient oriented.

That is an improvement because it allows the patient to know more about frequency and severity of the risk. And that is important for the patient to know.

With normal and foreseeable risks, it is only the frequency that counts and risks that are seldom seen must not be revealed. Some of these risks can endanger the life of the patient and then these risks are so relevant that a patient should know.

<u>Netherlands</u>: The practitioner must reveal everything what a patient must know about the nature and the aim of the treatment, about the consequences and the risks, about alternatives and the prognosis.

<u>Germany</u>: here also the relevant risk theory. It is the "verständige Patient" who decides what he wants to know. There is no need for summing up all thinkable risks. The doctor must decide what he will tell in connection with the specific patient and his specific treatment.

Especially for diagnostic treatments, the doctor has a duty to inform his patient about risks that are very rare: 1 per 10 to 20000.

In some common-law countries the information is practitioner oriented, which means that a doctor has to reveal to the patient what other doctors should do. But here also we see that this theory will not last long anymore

About the nature and the purpose of the treatment

If a treatment has no or a limited therapeutic value, the information to the patient must be wider, broader and more intensive. Think about esthetic surgery - but also about esthetic dentistry.

On the contrary, when a treatment is necessary and urgent and life threatening, the amount of information will be reduced.

Who has the burden of proof that information was properly given?

<u>USA</u>: proof must be brought by the patient <u>France</u>: it is the doctor who must show that he informed the patient (1997) <u>Germany</u>: The burden of proof stays in some cases with the doctor.

Germany differentiates between the "Selbstbestimmungsaufklärung" and the "Therapeutische Aufklärung" also named the "Sicherungsaufklärung".

In the first case the patient must only proof that he is physically damaged. An obligation of result or to obtain a specified result. And then there is a reversal of the burden of proof, that shifts to the doctor.

In the second case, when the doctor didn't inform the patient about the therapy, it will be the patient who has the burden of proof (fault, damage and causal relation) Only in the case of a "Reinen Diagnosevertrag" the doctor must proof that he fulfilled all the requirements of his duty to inform the patient.

Belgium: after the judgement of the Court de Cassation - France 1997, Belgian jurisdictions followed the French example, but later on the burden of proof was laid again with the patient.

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Punkten mit dem Arbeitskreis

Ist Punktesammeln sinnvoll? Fakt ist, dass beispielsweise in den USA die jährliche Erteilung der Lizenz zur Ausübung der Zahnheilkunde von der Teilnahme an Fortbildungsveranstaltungen abhängig ist.

Die Vielfalt von Fortbildungsveranstaltungen durch die Zahnärztekammern und wissenschaftlichen Fachgesellschaften zeigt, dass ein Großteil der deutschen Zahnärzteschaft die Verpflichtung zur Fortbildung ernst nimmt Die Teilnehmer an unserer Tagung erhalten einen Fortbildungsnachweis. Die Deutsche Gesellschaft für Zahn-, Mund- und Kieferheilkunde erkennt diese Veranstaltung als hochwertige Fortbildungsveranstaltung nach den Richtlinien der DGZMK zur Erlangung des DGZMK-Fortbildungssiegels an und bewertet sie mit 6 Fortbildungspunkten entsprechend der Punktebewertung für das Fortbildungssiegel der Bundeszahnärztekammer und der DGZMK.

Herausgeber der Newsletter:

The German Academy of Forensic Odontostomatology of the German Society of Dental Oral and Craniomandibular Sciences and the German Society of Legal Medicine

Redaktion und Vorstand des Arbeitskreises:

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Programm der 28. Jahrestagung des Arbeitskreises Forensische Odonto-Stomatologie Johannes-Gutenberg-Universität Samstag, 16. Oktober 2004 Mainz

09.00-09.15 Eröffnung im Gutenberg Museum der Stadt Mainz Dr. Dr. Klaus Rötzscher, 1. Vorsitzender

> Begrüßung durch den Oberbürgermeister der Stadt Mainz Herr J. Beutel

Begrüßung durch den Dekan der Medizinischen Fakultät Prof. Dr. med. Dr. rer. nat. R. Urban

- 09.15-09.50 Führung durch das Gutenberg Museum
- 10.00-11.00 Orgelkonzert im Mainzer Dom Domorganist Albert Schönberger
- **11.00-12.20** Gemeinsames Mittagessen in der Mensa der Univ.-Kliniken

12.20-14.30 Verleihung des Gösta Gustafson Award mit Beiträgen der Amerikanischen Ärzte und Zahnärzte

> <u>im Großen Hörsaal der Univ.-Frauenklinik - gegenüber der</u> Zahnklinik, Augustusplatz, 55131 Mainz Dr. Dr. Klaus Rötzscher, Speyer

- 14.30-14.45 Diskussion Kaffeepause
- 14.45-15.15 Das Flugunglück am Bodensee 2002 Dr. Dr. Claus Grundmann, Duisburg
- 15.15-15.45 Jurisprudence what 's going on ? Lic. jur. Yvo Vermylen, Boortmeerbeek, Belgien
- 15.45-16.00 Diskussion
- 16.00-16.15 Mitgliederversammlung

Tagungsende

HINWEIS:

Die Newsletter des Arbeitskreises

AKFOS_NL_2004_1.pdf, AKFOS_NL_2004_2.pdf und AKFOS_NL_2004_3.pdf sowie Newsletter1.2004.pdf und 2.Newsletter2004.pdf der International Organization for Forensic Odontology (I.O.F.O.S.) Editor Dr. Wencke Stene-Johansen, Parkveien 60, N-0254 Oslo eMail wenckesj@online.no

können als PDF-Datei mit Adobe[®]Acrobat[®] ab Version 5.0 gelesen werden.

Information about Quality Assurance in Forensic Odontology

by Tore Solheim, president of IOFOS, March 3rd, 2004

We have now in the IOFOS executive worked through the suggestions for quality assurance. As you may remember I made a suggestion which is posted in our web page www.iofos.org. During the meeting at *Hafjell* this winter a number of suggestions for improvements come up. These have now been worked into the new suggestions you will find as attachment. We would like your society to go through it and come up with comments or additional suggestions before September 1st this year. Then we will go though the comments and make the final changes after which the recommendations will replace my suggestion at our web page.

You may find these recommendations partly illogical. However we have tried to follow as closely as possible the recommendations given by the various committees at *Hafjell*. At this stage we fell it is important to come up with so many steps as possible. Thus a number of steps that the committees wanted to exclude because they were not applicable in their views, are upheld. Mark that a number of these are just in blue which means just recommended. We assume this is just the start of the work and we aim at making the Hong Kong meeting a special meeting to again go through and improve the recommendation for identification. So at this stage do not worry too much about the logic, see if what you think is important steps are missing. Also the balance between black and blue is not adjusted as a number of the points in blue will be necessary to use and should have been in black.

We would also like to know if these quality assurance rules are something your society can support and perhaps ask their member to follow? At the moment so little is obligatory so it should not be so difficult. Please mail me back!

Quality Assurance in Forensic Odontology

General considerations

Quality assurance means systems to ensure that the work is done at least according to a minimum quality standard. By working with these standards it is the ultimate goal that the quality should be improved. In an industry where the product can be measured and tested, this is generally easy. In dentistry and forensics, however, where the product also comprises personal assessment and a certain degree of art this is much more difficult. Overly rigid rules may even be an obstacle to personal improvement and general development. Thus there is a danger that too rigid rules may have the opposite effect of what was intended.

Points to observe

The simplest way of assuring the quality of forensic odontology work and reports is to state which points should be observed/examined. The expert retains freedom to decide how to perform the examination and describe it, whilst still ensuring that the expert has to do something regarding the individual points. By ignoring these points he may be subject to criticism. This form of quality assurance has been partly performed in forensic odontology since the 1960s. Quality assurance has not been described earlier, but the construction of forms for identification is a good example of this form of early quality assurance. The meaning behind each field is that it should be taken into account. Thus all fields should be properly filled in even if no information was available. It was meant as a memory aid, particularly to help untrained forensic odontologists. However, a number of forensic odontologists have not understood this idea and often just ignored fields without any explanation. Different national forms have been constructed without discussion on the need for each individual type of information and indeed without any international agreement on which information is needed. Interpol have attempted to help by drafting forms for reporting in identification. However, these have also been created without any international discussion or agreement on what these forms should contain. Thus a number of countries and forensic odontologists still rely on their own forms, even if they do lack some of the information in the Interpol forms.

Obviously, there are disagreements on what a professional forensic odontology examination should be and how it should be reported. In an attempt to establish a form of minimal international standards IOFOS have started this work. We hope IOFOS carries enough authority to be accepted. However, it must be clear that the standards we develop should be simple, easily understood and generally accepted. We should at this stage not strive for the ultimate ideal. We must hope that future quality development work will improve the standard. In this way we hope still to leave a lot to personal quality assurance by the individual expert and national societies. We should also not make any rule that may be an obstacle to future improvements in the techniques.

Quality description

A step further is that at each observation, the method of observation and description is given. Let us take an example from industry. A object is produced and the simple quality assurance, point to observe means that "the length of the object should be measured". It does not state how and within which limits the length should be. A quality description is usually needed which will imply the "how it is measured, the accuracy with which the length measurement is taken and secondly within which limits the length is allowed to vary". This is necessary if the object is going to fit other objects and function in the future.

This type of quality description is not so obvious in forensic odontology. It is also often much more difficult to perform. Sometimes there will be considerable disagreement between forensic odontologists about how this should be done and even about the rational for doing this. Even if we would prefer to include some quality description in our system I am of the opinion that we may basically have to leave this to future quality development work by IOFOS or local national societies.

Quality improvements

Any measures taken with the aim of improving quality can be called quality improvements. Usually these should be the result of discussion and agreement of rules which improves the quality. This is a more advanced stage of quality assurance. However, any work with quality assurance or standards may result in improvements of the quality, especially for those who work with poor quality from the start.

Required procedures

A basic minimum of details should always be included in the procedure. Any deviation from this should be substanciated and explained in the report. At a later stage these may be reclassified only as "recommended".

Recommended procedures

Details where there is disagreement of whether they really are necessary should be classified only as "recommended". If this step is omitted it needs not be explained and substanciated in the report. These details may be wise to include in your procedure. At a later stage it may be they may be reclassified as required.

International quality assurance in forensic odontology.

Agreement in dentistry is difficult and few standards exist. Except for standards for designating teeth and surfaces, no international standards are found. Even if these standards exist they are only followed by a few countries and dental schools. In forensic odontology where international standards would be important, no standards at all exist. We are not even aware that any attempts at forming such standards have been made. The only exception may be the Interpol forms for identification which have two pages for missing person and dead person. Here the dental form is a part of a complete form for all part of the identification work. In the Nordic countries these forms have been adopted and translated to the national languages. However, we are only some of the few countries where the police have adopted these forms. In addition, Interpol has published a guide to identification which also contains some guidelines for odontologic comparisons.

In many countries national forms exist, often quite different from the Interpol forms. We are well aware that it may be impossible to reach international agreement on quality assurance on a detailed level. Especially when it is a question about what quality really is under each point the view may be quite divergent. Special national requirements and laws may also make it difficult to be specific. It is therefore obvious that it will additionally be necessary to formulate more specific national guidelines for quality assurance. It is however, hoped that international guidelines can be adopted as part of the national rules and that they may contribute to more trust in the results from cases handled in other countries by their experts. International guidelines do not exclude the possibility that individual forensic odontologists formulate their own specific rules for quality assurance. However, these rules should only specify or expand the international guidelines and never be in conflict with those.

IOFOS and quality assurance

IOFOS is the only broad international organization of forensic odontology. It has clearly an object and responsibility for improving the quality of forensic odontologists around the world. There are many ways to do this such as publishing scientific articles, arrange meetings and courses and formulate guidelines for quality assurance. IOFOS is active in all these fields. It is certainly the responsibility of IOFOS to formulate some general concepts for quality assurance.

Other bodies like Interpol have been trying to do something in this field. However, from the point of view of forensic odontologists in general, the dentists who have been active in Interpol is only a small group and have no general representation. Some of the forensic odontology delegates have only had minimal experience and have attended in order to learn. It has also been up to the police authorities to decide weather they wanted to consult a dentist or not. Therefore Interpol also needs the guidance of the international community of forensic odontologists; that is IOFOS. FDI has recommended standard nomenclature for teeth and surfaces which also has been accepted as standard by ISO. However, their work has ended there and in addition it was aimed at practicing dentists not forensic odontologists.

It is hoped that the work of the meeting at *Hafjell*, Norway March 11th to 14th may end in agreements on some important aspects of quality assurance in the different fields of forensic odontology. The following guidelines are suggestions to be further elaborated at that meeting.

Quality assurance in identification, single cases

January 1st, 2004

General

- 1. The examination has the purpose of describing all oral and perioral details that can be used for identification.
- 2. A further purpose is to give a general oral description of the person including the gender and age.
- 3. As the death may be due to trauma or a violent crime any injuries to the teeth, jaws and peri-oral tissues must be described and related to what may have happened.

The commission

- 1. Note the date and by whom you are asked to perform the examination
- 2. Note the date and place where the body was found
- 3. Note the type of event which the police think may be the cause of death
- 4. Note the date, place, forensic pathologist and policeman responsible for the autopsy.
- 5. Note the main findings of the autopsy and the cause of death as assessed by the forensic pathologist
- 6. Note the date and place of your examination
- 7. Note who was present and/or who helped you

The examination of the dead

- 1. Note which material is available
- 2. Assess the condition of the material
- 3. Describe any injuries to the teeth, jaw bones and intra and peri-oral soft tissues.
- 4. Relate these injuries to the time of death
- 5. Relate these injuries to the manner of death
- 6. Describe what you do to the material
- 7. Describe if the material remains with the body or is removed and where it is kept
- 8. Describe the teeth one by one
 - a. describe the clinical status of the tooth: sound, carious, filled, crown, remaining root, tooth lost PM and tooth missing
 - b. describe additional features of the tooth
 - c. describe any material used in restorations
 - d. describe surfaces involved
 - e. use a standard set of abbreviations
 - f. deliver a list of abbreviations used
- 9. Give a closer description of complicated prosthetic works

- 10. Anatomical details like bite, attrition, tooth colour, periodontal condition and calculus and staining
- 11. Radiographs taken and characteristics shown
- 12. Additional examinations and findings

Examination of the ante-mortem material (records) of a missing person

- 1. Note name, date of birth and address of the missing person
- 2. Note the gender and age of the missing person
- 3. Note the circumstances under which the person is missing
- 4. Note dental information given by relatives or others
- 5. Note the name an address and telephone of dentist(s) from where the record is obtained.
- 6. Describe the teeth one by one
 - a. use the same nomenclature as under the examination of the dead person
- 7. Give a closer description of complicated prosthetic works
- 8. Anatomical details like bite, attrition, tooth colour, periodontal condition and calculus and staining
- 9. Radiographs taken and characteristics shown
- 10. Additional examinations and findings

The comparison

- 1. Look for non-concordant details
 - a. if non-explicable -> exclusion of identity
 - b. if explicable > do not exclude identity, but continue to find comparable details
- 2. Look for comparable details
 - a. note each and relate to which tooth

Conclusions

- 1. Use one of the following conclusions
 - a. Identity established Less than 1:10 000 other person may fit the details - This conclusion may stand alone as evidence of identity - The experts should feel confident that the identity is correct
 - b. Identity probable > 1:10 000 but < 1:100 persons may fit the details
 - c. Identity possible > 1:100 persons may fit the details
- 2. Two dentists should agree upon the conclusion and sign the report

Identification after disasters

January 1st, 2004

General

1. The purpose is to help to identify as many persons as possible

2. It is especially important to act as a team member

3. Unusual jobs like working at the scene or with the AM information group must be done

- 1. Extreme accuracy in the work is especially important
- 2. Each identification is like in single cases
- 3. It is important to try to help in establishing the cause of the disaster and look for injury patterns and if special precautions could have saved lives.

Work at the scene

If possible, a forensic odontologists should participate at the work at the scene. The task is to

- a. help in the search for bodies
- b. describe the teeth at the scene
- c. make sure no teeth are lost on the ground
- d. in the case of heavy fire, assess the value of taking dental radiographs at the scene if possible
- e. secure the head for transport
- f. help in any other task

Work at the autopsy

- a. each body should be described by a team of two forensic odontologists
- b. if decided take photo of the front teeth
- c. if possible take out the jaws store the jaws
- d. describe the jaws and teeth
- e. take systematic radiographs

Work in the AM information group

- a. help the police locate the dentist
- b. talk to the dentist and describe the material needed
- c. in case of hurry have the dentist describe the teeth and send the material later
- d. transcribe the dental information on to the form used
- e. keep the material in the ante mortem file

Computer registrations if decided

- a. Make sure you are properly trained with the system you use be especially aware of the coding and search systems - possibilities and limitations
- b. be aware of the possibilities of the program a sorting program a complete program for the report and sorting
- c. enter post mortem data preferably directly during the autopsy
- d. if decided, enter ante mortem data preferably directly

Comparisons

- a. assess the value of computer search
- b. compare directly information where identity is indicated
- c. if exclusion, give the police immediately information
- d. if identity possible, compare and evaluate immediately and inform the police

Conclusions of the odontologic comparison

- Use one of the following conclusions a. Identity established Less than 1:10 000 other person may fit the details - This conclusion may stand alone as evidence of identity - The experts should feel confident that the identity is correct
 - a. Identity probable > 1:10 000 but < 1:100 persons may fit the details
 - b. Identity possible > 1:100 persons may fit the details
- 2. Two dentists should agree upon the conclusion and sign the report

Final identifications

- 1. take part in the discussion and be prepared to describe and explain the dental findings and the importance for the identification
- 2. be prepared to stop wrong identification
- 3. be prepared to sign the final identification with the other expert groups

Tagungskalender 2005

22.02. New Orleans	ASFO Meeting	Info: susankrivera@aol.com
27.0602.07. Oslo	6th International Course in Forensic Odontology	Info: Prof. Tore Solheim solheim@odont.uio.no
2126.08.	IAFS (International Association of Forensic	Info: www.iafs2005.com
Hong Kong	Sciences), 17 th Meeting	lafs2005@govtlab.gov.hk
2022.10. Florenz	IDEALS, 6 th International Congress on Dental Law and Ethics	Info: www.ideals.ac Yvo Vermylen, President of Ideals
2430.10. Berlin	128. Jahrestagung DGZMK gemeinsam mit allen Fachgesellschaften und Gruppierungen	Info: http://www.dgzmk.de

6th International Course in Forensic Odontology **Personal Identification by Dental methods** OSLO, NORWAY, JUNE 27 – JULY 2, 2005

Place: The Department of Pathology and Forensic Odontology, and Forensic Medicine, University of Oslo, Norway

Nordic forensic odontologist have for many years been well regarded for their systematic approach to identification, as have the police through Identification Commissions. Academic positions in forensic odontology have further added to the scientific background for our work.

We want to share some of our techniques and experiences with you.

The International Organization for Forensic Odonto-Stomatology (IOFOS) and the Nordic Organization for Forensic Odonto-Stomatology (NOFOS) in cooperation with the Department of and Forensic Odontology Pathology Dental Faculty, University Norway, invite you to a course in personal identification identification, with special emphases on dental methods.

Aim of the course:

to enable the dentist to perform dental identification in single cases as well as in mass disasters

to enable the dentist to participate in the reconstruction of the identity of a person when comparative identification is not possible

to enable the dentist to participate in a DVI team after a mass disaster and to handle identification programmes in computers

Topics:

Principles of comparative identification

- Theoretical aspects
- The INTERPOL forms
- Practical work in the mortuary
- Obtaining post-mortem dental status of a dead person
- Retrieving relevant information from dental records
- Comparison of ante- and post-• mortem data
- . Evaluation of similarities and differences
- . Formulation of conclusions and summarising comparable details

of Oslo, Principles of reconstructive

- Estimation of age, sex, height, race, habits, social status, occupation, etc
- Theoretical aspects
- Practical training
- Contribution to the announcement . for a missing person

Mass disasters

- Theoretical aspects
- The DVI team .
- Manual and computerised mock accidents

Language: English Fee: 900 €

"The international symposium on Craniofacial Reconstruction" May 15th - 16th, 2006 in Leuven, Belgium and "The international symposium on Forensic Odontology" May 17th-20th, 2006

Both meetings are planned well ahead in order to allow you to make the necessary arrangements in your agenda. More than 20 internationally recognised authorities have already been contacted and agreed to lecture on the occasion of both meetings. And there are even more to come ... - More information to come ... It is very much on purpose that I want to keep this mail as short as possible. The most important message is: - check your agenda and - visit WWW.MFO.BE, click "2006 meetings" and submit the preregistration form with your coordinates so that we can keep you informed with the latest news on both symposiums. Guy Willems