Contact allergies owing to gloves

A growing problem in dentistry

By Ben Adriaanse, DT Netherlands

In recent years, researchers have noted a significant increase in contact allergies to rubber ad-
ditives among health care profes-
sionals. Although the cause of this cannot be stated with cer-
tainty, experts believe that ni-
trine gloves, which are most com-
monly used in dental care today, have contributed significantly.

In the 1980s, the use of med-
cal gloves made of natural rub-
ber latex was introduced into dentistry. Owing to an alarming number of allergic reactions caused by certain proteins con-
tained in latex, synthetic alterna-
tives like nitrile and vinyl gloves emerged shortly afterwards. While they, like other alterna-
tives, score significantly lower in comfort and elasticity, nitrile gloves are most commonly used by dentists.

According to Michiel Paping, director of Budev, a Dutch re-
search and development company focused on natural rubber latex allergens, type I allergic re-
actions, which are immediate re-
actions to allergens in a product, are very rare nowadays owing to improved quality standards and production processes. Type IV re-
actions, however, are delayed re-
actions to the chemicals used in the production process and are more common and can arise in re-
response to nitrile or vinyl. "In fact, I think that synthetic rubber cause more contact allergies than natural rubber latex," he told Dental Tribune Netherlands.

"It is not the raw, unproctessed rubber that causes type IV allergic contact eczema but the excipients added during the manufacturing process, such as vulcanisation ac-
celerators, plasticisers, fillers, an-
tioxidants and colourants. Excipi-
tents are present in both natural and synthetic rubber gloves," said Prof. An Goossens, a contact al-
ergy expert at KU Leuven’s De-
partment of Dermatology in Bel-
gium.

"According to studies con-
ducted in Finland and the Netherlands, the quality of latex gloves today is evolving and most manufacturers have eradi-
cated the proteins that can cause allergies from their production. However, currently there is in-
sufficient data on the new gener-
ation of latex gloves but initial studies have shown promising results.

FIDI Global Caries Initiative steps ahead

By Virginie Horn, Education and Development Manager of the FDI

The Global Caries Initiative (GCI), was launched by FDI World Dental Federation in 2009, set-
ing out an ambitious worldwide agenda together with a profes-
sionals-led call to action, whose goal is "to improve oral health through the implementation of a new paradigm for managing den-
tal caries and its consequences, one that is based on our current knowledge of the disease process and its prevention, so as to de-

erive optimal oral and thus gen-
eral health and well being to all people by 2020."

FDI and its membership ac-

knowledge that they have a sin-
gular role and responsibility in terms of caries management and leadership in any process of change. Together, they are work-
ing to reduce the burden of caries in the population worldwide. FDI membership has, through the Global Caries Initiative, reaf-

irmed the federation’s role as the global representative body of Dental Medicine and Oral Health.

The most significant achieve-
ments of FDI Global Caries Ini-
tiative (GCI) so far was the devel-

dopment of the FDI Caries Ma-

trix," which aims to facilitate the diag-


ose between all stakehold-


ers. The Caries Matrix acts as a bridge between WHO Basic Meth-

ods (DMFT) and new approaches such as the International Caries Etiology and Preven-
tion System (ICPES). It recog-
nises "enamel caries" or white spots and "non cavitated dentine lesions", which were not

included within the traditional model, but can now be managed, through the Caries Matrix, by preventive measures and tools.

The World Oral Health Forum session organised in Hong Kong during the FDI congress on "Caries, a silent epidemic" (www.fdiworlddental.org/gci) pro-


ided another opportunity for ex-


erts to meet and discuss with a panel of economists, public health experts and other medical profession-


als the need to engage in our fight against the most com-


on oral health disease.

FDI has been working with Dental Tribune International to deliver a professional communi-


cation and education platform (www.globalcariesinitiative.org) to facilitate activities at a global level and support the implemen-
tation of GCI at a national level by FIDI member dental associations.

More recently, the UNEP Mina-


mata Convention on mercury is creating a framework for a phase

US study suggests dentists cause implant failure

The indications and versatility of dental implants have increased, and so have complications. Re-
searchers from the Loma Linda University Dental School in the US have suggested that, re-
gardless of patient risk factors like bruxism, successful long-
term outcomes significantly de-

pend on the experience of the cli-

cian performing the procedure.

By reviewing the records of pa-


tients who had received full arch maxillary and/or mandibular supported fixed complete den-
tures in the period of ten years, the researchers found that 12 per cent of implants failed when cli-


nicians had less than five years of experience in the field. Implants were also twice as likely to fail if the surgeon had performed less than 50 implantations in his ca-


reer, they report.

Other contributors to implant failure were identified as being related to the patient rather than the implant. Almost every third patient with diabetes or a history of bruxism had experienced im-


plant failure. Other risk factors commonly associated with implant failure like the type of prosthesis used, smoking or implant location were


found to have less impact on long-
term success, according to the re-
searchers. They stated that the ab-
solute rate of success was found to be 90 per cent.

Overall, the records of 50 pa-


patients treated with 297 implants at the school were reviewed.

According to the experts, a change of thinking and a policy on rubber gloves based on neutral in-
formation is urgently needed. Cur-


ently, a number of inferior pro-


ducts on the market owing to the fac-


that CE markings can be


cluded in listed and unlisted prod-


cts on the market owing to the


fact that CE markings can be


non conformant.

Contact allergies caused by gloves are a growing problem and should not be underesti-


mated, the experts concluded.

With an annual global use of more than 150 billion pieces, the medical glove is something that
defines a personal and professional job that requires serious attention,” said Paping. “It is a condition that can threaten your career and you can develop it suddenly,” he warned.