Contact allergies owing to gloves

A growing problem in dentistry

In recent years, researchers have noted a significant increase in contact allergies to rubber additives among health care professionals. Although the cause of this cannot be stated with certainty, experts believe that nitrile gloves, which are most commonly used in dental care today, have contributed significantly.

[PICTURE: ©KARAMYSH]

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

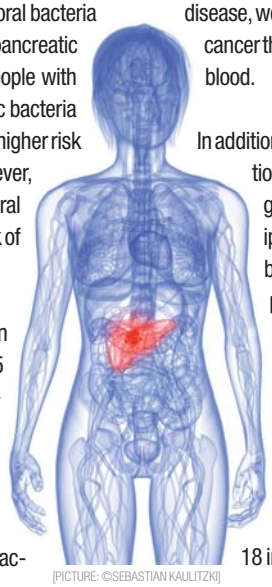
Alongside the growing number of contact allergies in recent years that are likely caused by added chemicals or antimicrobial agents, Paping and his team have observed an increase in allergic reactions in daily practice. "Recently, we have seen that the professional body is becoming alarmed. Despite this, I am concerned that the average dentist is not aware of this matter," he said.

Source: DTI

Periodontitis might increase

Pancreatic cancer risk

New research from the US strengthens the suggestion that there is a mechanism linking the oral bacteria that cause periodontal disease and pancreatic cancer. Scientists have found that people with high levels of antibodies to pathogenic bacteria found in the oral cavity have a twofold higher risk of developing pancreatic cancer. However, high levels of another but harmless oral bacterium may indicate a reduced risk of developing the disease.



[PICTURE: ©SEBASTIAN KAULITZKI]

For the study, researchers from Brown University measured antibodies to 25 pathogenic and commensal oral bacteria in blood samples from 405 patients with pancreatic cancer and 416 controls and found that participants exhibiting high levels of antibodies against *Porphyromonas gingivalis*, a bacterium that is implicated in some forms of periodontal disease, were twice as likely to develop pancreatic cancer than participants with lower levels in their blood.

In addition, the researchers explored the association of pancreatic cancer with nonpathogenic oral bacteria and found that participants with overall higher levels of antibodies had a 45 per cent lower risk of pancreatic cancer than participants with overall lower levels of these antibodies. They thus speculate that this may indicate an innate highly active immune response that is protective against cancer.

The study was published online on Sept. 18 in the *Gut* journal ahead of print.

Smiling may

Reduce stress and help heart health

Scientists have found that different types of smiling positively affect an individual's ability to recover from episodes of stress. They investigated whether manipulation of facial expressions would influence cardiovascular and affective responses to stress and found that study participants who were instructed to smile had lower heart-rate levels after recovery from stressful activities than participants who adopted neutral facial expressions, even if participants were not aware of their smile.

[PICTURE: ©SERRNOVIK]

The study was conducted by researchers at the University of Kansas with 170 healthy participants between 18 and 25 (66 per cent female and 44 per cent male. Throughout the experiment, the researchers measured heart rate and self-reported stress level and found that the smiling groups showed lower heart-rate levels during recovery from the tasks, compared with participants in the neutral group. In order to determine whether benefits are also present when awareness of facial expression is absent, half of the group members in each smiling group were not explicitly told to smile but also held the chopsticks in a manner that forced them to. The researchers observed that they too reported positive effects compared with those with neutral expressions although they were not aware of their smiles.

"These findings show that smiling during brief stressors can help to reduce the intensity of the body's stress response, regardless of whether the person actually feels happy," the researchers concluded. The study will be published in the forthcoming issue of the *Psychological Science* journal.

New study reveals

Oral health's growing price tag for Europe

[PICTURE: ©ALMAGAMI]

Treatment costs for oral and dental conditions across Europe often exceed those of other major diseases, including cancer, heart disease, stroke, and dementia, according to a pan-European study released in September 2012. The State of Oral Health in Europe Report estimates current spending in dental treatment in the EU 27 to be close to €79 billion per year, a figure set to reach €93 billion by the year 2020 if adequate action is not taken now. The report reveals that oral health-related costs are still on the rise despite the fact that caries and their complications are highly preventable through a healthy, balanced diet and routine oral hygiene practices.

The study was commissioned by the Platform for Better Oral Health in Europe, a forum that brings together European organisations that work towards the promotion of oral health and the prevention of oral diseases in Europe. The report analysed data from 12 European countries (Austria, Cyprus, Denmark, France, Germany, Ireland, Italy, Lithuania, Poland, Romania, Spain and the United Kingdom). The report shows that–despite significant achievements in the prevention of cavities in Europe – much remains to be done in areas such as: promoting oral health awareness, tackling oral health inequalities and addressing common risk factors. Further indispensable tools in the fight for better oral health in Europe include the development of high quality, comparable oral health data and better cost-effectiveness studies to assess the impact of prevention initiatives.

On the basis of the report findings, the Platform has developed a series of recommendations and calls on policymakers.

Presenting the results of the study at the first European Oral Health Summit, held 5 September, 2012, at the European Parliament in Brussels, Member of the European Parliament Ms. Karin Kadenbach said, "In a time of austerity measures and growing pressure on healthcare budgets, this report is a timely reminder that we have to tackle the persisting disparities in oral health across and within EU countries, with regards to socioeconomic status, age, gender, or indeed general health status."

Speaking at the Summit, Professor Kenneth Eaton, Chairman of the Platform for Better Oral Health in Europe, called for more policy attention and action on the topic of oral health. "At the EU level, there is currently a lack of understanding about the integral role oral health plays in overall health and well-being," he said. "On behalf of the Platform for Better Oral Health in Europe, I hope and believe we finally have the adequate tools and procedures in place to work effectively together and foster policy decisions which will benefit the oral health of everyone in Europe in the years to come."

Source: www.oralhealthplatform.eu

Minimally Invasive Surgery

Boosts Outpatient Procedures

More and more surgical procedures are being performed globally every year, driving the demand for new and improved surgical equipment, states a new report by healthcare experts GBI Research. The new report Surgical Equipment Market to 2018 —Increased Access to Ambulatory Surgical Centers to Drive Outpatient Surgery Volumes shows that this increase in surgical procedures is due to improving healthcare infrastructure in emerging countries, increasing cases of lifestyle diseases and technological innovations boosting the possible workload of surgeons.

According to the Centre for Disease Control (CDC), approximately 48 million surgical procedures are performed in the US each year, while emerging countries such as India and China hold huge future potential for surgery due to increased healthcare expenditure and huge patient populations. The spread of westernised living standards has led to a worldwide increase in diseases such as obesity, lung cancer, cardiovascular diseases and kidney disorders, expanding the patient population eligible for surgery.

[PICTURE: ©VALERIY VELIKOV]

Accessibility, affordability and patient comfort are also driving up the demand for outpatient procedures. Outpatient surgery is found to be more cost-effective than inpatient surgeries, as they eliminate hospitalization costs, minimize the time spent in the operating theatre, and cut costs for staffing and travel. The increasing volume of surgical procedures being carried out is resulting in a growing demand for surgical equipment such as surgical sutures, electrosurgical devices and hand instruments. The global market for surgical equipment is therefore forecast to exceed $7 billion by 2018, following growth at a Compound Annual Growth Rate (CAGR) of 4.2% during 2011–2018.

Benefits of tooth scaling

Questioned by German organisation

[PICTURE: ©NOBEASTSOFIERCE]

After researching a number of current studies on the procedure, scientists have found that tooth scaling does not offer any proven medical benefits to patients. The investigators of IGeL-Monitor, a website launched earlier this year to monitor individual health services (i.e. those paid for privately) within the German health system, evaluated current scientific studies of adults without periodontitis with regard to the medical benefits of tooth scaling. They said that they found no significant evidence that professional tooth scaling affects oral health positively, as study participants who had undergone tooth scaling in addition to their daily dental care and regular check-ups did not have an improved oral health status. Moreover, possible damage caused by the procedure was only inadequately covered by the studies, they said.