

Development of diagnostic criteria and establishing an international database of patients with allergic reactions to metal implants (ALLREMA Project)



Prof Peter Thomas

Every year, an increasing number of patients will receive metal implants and regain quality of life.

Sometimes metal implants like stents, pacemakers, osteosynthesis materials and joint replacements may cause complications. Correspondingly, about 9% of the annual hip/knee replacements are revision surgeries. When assessing “intolerance” reactions (ie both cutaneous and extracutaneous symptoms) there is no clear definition of diagnostic steps and criteria for metal implant allergy. Thus, the ALLREMA project intends to fill this gap.

The collaboration of experts from 7 countries (Czech Republic, Denmark, Germany, Netherlands, Poland, Sweden and Switzerland) will enable consensus on diagnostic criteria and the creation of corresponding documentation. Major components are a standardised questionnaire and patch test protocols. Furthermore, the diagnostic role of lymphocyte transformation test (LTT) will be evaluated. To allow description and definition of the clinical spectrum of adverse/allergic reactions to metal implants a larger data collection is intended. For this purpose a standardised data input protocol will be developed in order to enable national registry-like data collection and evaluation.

Based on this approach, subsequent data analysis at international level will be possible. In addition, such an expert network will function as an information platform for the medical community. A website will be created offering links to the national partners and corresponding sources of information. At present the first

publication is in preparation based on the results of the consensus conference held in June 2017 in Munich.

By focusing on metal implant allergy, standardisation of work-up protocols for respective patients will be proposed by questionnaire-aided history-taking, documentation protocol, patch test series and critically discussing and defining additional diagnostic steps such as histology and LTT. Such diagnostic steps and diagnosis criteria can then be utilised for a European guideline.

The information platform, starting with this group of experts, should be activated in early 2018. It is also open to further input and feedback from the European medical community as well as providing information support to yet underinformed colleagues. Currently, ALLREMA is also working on integrating an information link to implant developers and materials-testing experts in such a platform in order to facilitate information access for dermato-allergologists. In parallel to publication of the consensus paper, there will be dissemination of the standardised input protocol for data collection and giving such protocol information to European dermato-allergologists. ●

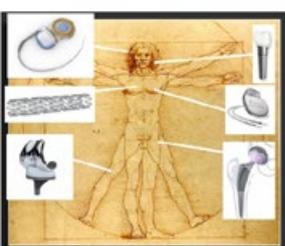
On behalf of all co-operating project partners,

Peter Thomas MD PhD

*Clinic for Dermatology and Allergology
Ludwig-Maximilians-University Munich
Frauenlobstr. 9-11
D-80337 Munich, Germany
Peter.Thomas@med.uni-muenchen.de*



Metal implants – Part of our life



In 2015 in Germany alone:

- ~ 210.000 hip arthroplasties
- ~ 165.000 knee arthroplasties
- ~ 900.000 dental implants
- ~ 260.000 stents
- ~ 75.000 pacemakers
- ~ 3.000 cochlea implants