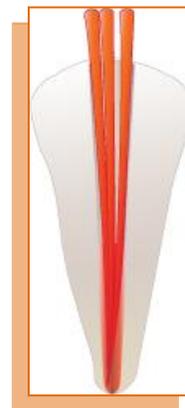


Gutta Percha Points and Latex Allergy (11/07)

Kang PB, Vogt K, Gruninger SE, Marshall M, Siew C, Meyer DM. The immuno cross-reactivity of gutta percha points. *Dent Mater* 2007;23:380–384.

The purpose of this study was to test the postulated immuno cross-reactivity between proteins derived from raw gutta percha (RGP), gutta percha point (GPP) and natural rubber latex (NRL). Antigenicity and cross-reactivity of proteins were determined by the FITkit (FITBiotech, Finland) and enzyme-linked immunosorbent assay (ELISA) inhibition assays. Antigenicity of proteins derived from RGP or GPP was not demonstrated. Except for NRL glove extracts, neither extracts from RGP or GPP were reactive in ELISA inhibition assay. **The authors concluded that there is no immunologic cross-reactivity in vitro between proteins derived from RGP or GPP, and from NRL gloves. Thus, therapeutic use of GPP is unlikely to initiate adverse immuno-reactivity in individuals previously sensitized to NRL proteins.**



DECS Comment: Latex allergy, or type I hypersensitivity to latex proteins, can be a serious systemic allergic reaction. Clinically, gutta-percha alone is not likely to induce symptoms in patients with a type I latex allergy. However, since these patients often have a lengthy history of allergies, they may react to other materials used during dental procedures. Taking thorough health histories for both patients and dental personnel, followed by avoidance of contact with potential allergens can minimize the possibility of adverse reactions. When treating patients with a suspected or documented type I NRL allergy, dentists should be aware of potential reactions to dental chemicals and materials, including gloves, dental dams, anesthetic cartridge stoppers, methacrylates, anesthetics, and disinfectants. Consultation with the patient's primary care provider may be indicated for optimal patient management. Also, dental health-care personnel should be able to recognize and treat the complications of latex exposure.

Selected References

- Costa GE, Johnson JD, Hamilton RG. Cross-Reactivity studies of gutta-percha, gutta-balata, and natural rubber latex (*Hevea brasiliensis*). *J Endod* 2001;27:584–587.
- Hamann C, Rodgers PA, Alenius H, Halsey JF, Sullivan K. Cross-reactivity between gutta-percha and natural rubber latex. *J Am Dent Assoc* 2002;133:1357–1367.