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Anti-Acetylcholine Receptor Antibody in Myasthenia Gravis : Relationship to Disease Severity and Effect of Thymectomy.

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Levels of anti-acetylcholine receptor (AChR) antibodies were investigated in sera of 272 patients with myasthenia gravis (MG) and 75 patients with other autoimmune diseases by the immunoprecipitation method (RIA) using rat denervated muscle AChR as an antigen. Anti-AChR antibodies were found in over 70% of MG but not in other autoimmune diseases except for only 2 cases with border-line titer. Most patients with ocular MG without thymoma had insignificant levels of antibody titers. In patients with generalized MG, both the mean values and positive percentages of antibodies were roughly correlated with clinical severities. Antibody titers and clinical features were estimated for a longterm period on MG patients who underwent thymectomy. After operation, anti-AChR antibody levels tended to decrease significantly corresponding to the clinical improvement, moreover, patients with thymic hyperplasia.

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Amino Acid Sequence of a Cytotoxin-Like Basic Protein with Low Cytotoxic Activity from the Venom of the Thailand Cobra *Naja naja siamensis*.

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A cytotoxin-like basic protein (CLBP) was isolated from the venom of the Thailand cobra (*Naja naja siamensis*). The cytotoxicity of CLBP toward FL cells was one order of magnitude lower than those of cytotoxins. The amino acid sequence was determined by a combination of conventional methods. The total number of amino acid residues was 62, giving a molecular mass of 6977 Da. The sequence at residues 25-30 in the CLBP molecule was found to be significantly different from those of cytotoxins. This region might play an important role in the cytotoxic activity of cytotoxins. Cobra venom cytotoxins are highly basic polypeptides consisting of 60-61 amino acid residues, and exhibit cytotoxic activities against many kinds of cells such as Yoshida sarcoma cells and Fogh-Lund (FL) cells.

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Amino Acid Sequence of A Less-Cytotoxic Basic Polypeptide (LCBP) Isolated from the Venom of the Indian Cobra (*Naja naja*).

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A less-cytotoxic polypeptide, designated as LCBP, was isolated from the venom of *Naja naja* by gel filtration on Sephadex G-50 followed by CM-cellulose chromatography. The cytotoxicity toward Yoshida sarcoma cells and lethal toxicity toward mice of LCBP were both one order of magnitude lower than that of cytotoxins and that of toxin A, respectively. LCBP is a single polypeptide consisting of 61 amino acid residues with four intramolecular disulfide linkages, and the amino acid sequence is the same as that of cardiotoxin-like basic polypeptide (CLBP) isolated from the venom of *Naja naja atra*. This is the first time that the same polypeptides were isolated from different cobra venoms.