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Depolarization of Skeletal Muscle Cells in Culture by a Cardiotoxin-Like Basic Polypeptide from the Venom of the Taiwan Cobra (*Naja naja atra*).

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Cobra venoms contain small proteins, known as cardiotoxins, that cause systolic cardiac arrest by depolarizing cardiac cells. These cardiotoxins also can depolarize nerve and skeletal muscle cells. Depolarization of skeletal muscle cells in culture by a cardiotoxin-like basic polypeptide from the venom of the Taiwan cobra (*Naja naja atra*). A cardiotoxin-like basic polypeptide from the venom of *Naja naja atra* is homologous to cardiotoxins from the same venom, but much less toxic. To determine if it acts like the cardiotoxins its depolarizing ability was measured. It was about 10 times less potent than the cardiotoxins. Five amino acids are conserved in the sequences studied, on the exposed second and third loops of the toxin back bone. They may be part of the toxins' interactive site.

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Solid-Phase Radioimmunoassay for Antibody to Myelin Basic Protein and Its Measurement in Sera from Patients with Neurological Diseases.

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A solid-phase radioimmunoassay was developed for estimating antibody to myelin basic protein. Conditions of the various procedures were established for optimal specific antibody binding. Myelin basic protein was bound to microtiter plates, followed by incubation with diluted test serum. ¹²⁵I-protein A was used to measure the IgG bound to the antigen-coated well. Sera from 47 patients with multiple sclerosis, cerebrovascular disease, neuro-Behcet's disease, and other neurological diseases were tested for antibody to myelin basic protein. Positive serum antibody was predominantly found in patients with significant basic protein antigen in their cerebrospinal fluids.

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Effect of Estradiol Administration on Plasma Protein Composition in the Male Japanese Quail (*Coturnix coturnix japonica*).

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Estrogen can stimulate vitellogenesis in immature and mature male and female birds, amphibians, reptiles and fishes. In these animals, estradiol treatment produces profound changes in plasma protein, lipid and calcium. Five month-old male Japanese quail were injected with estradiol benzoate at a dose of 1 mg/bird/day for 4 consecutive days. Horizontal polyacryl amide gradient gel electrophoretograms of plasma proteins were compared before and after the estrogen treatment. After the estrogen treatment, the intensity of albumin and pretransferrin bands decreased drastically and that of transferrin and posttransferrin-2 were increased. In pretransferrin zone, new protein bands appeared. Fastest migrating estrogen dependent-prealbumin-3 protein bands occurred in estrogenized male quail plasma.