

their binding nor their activity is affected by blockers or activators of known receptors and ion channels. This suggests that sarafotoxins act on new targets. Their amino acid sequence shows a high degree of homology with that of endothelin.

Endothelin is a recently described 21-residue vasoconstrictor peptide found in porcine aortic endothelium. This is remarkable, since endothelin is a natural compound of the mammalian vascular system, while sarafotoxins are highly toxic components of snake venom.

Sarafotoxins S6 (SRTs a, b, and c) are a group of 21-residue cardiotoxic peptides that were isolated from the venom of the snake Atractaspis engaddensis. They are rich in cysteine (four residues per molecule) and show a high sequence homology. Two of these, a and b, are lethal and cause cardiac arrest and death in mice within minutes of intravenous administration. The median lethal dose is approximately 15 micrograms per kilogram of body weight.

3.3 Bioregulators

There are a number of human polypeptides of potential interest. The following is a partial list of these bioregulators, with their size in amino acid residues shown in brackets. They are: insulin-like growth factors [67,70]; thymopoietin [49]; gastric inhibitory polypeptide [43]; corticotropin [39]; cholecystokinin