

P122. ROLES OF CHELATION IN HEAVY METAL DETOXIFICATION

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Metals serve as essential components play critical roles not only biochemical but also physiological functions in the system. On the other side, heavy metals can cause serious toxic effects. Chelation therapy is used for this heavy metal toxicity. By this means, further metal absorption into the system is prevented and metal is eliminated from the circulation. An ideal chelator should have greater affinity, low toxicity and same distribution as the metal. In addition it should have high water solubility and should eliminate rapidly toxic metal. Chelation therapy is very effective against to acute poisoning and it removes metals from soft tissues. In other respects oral therapy is available and it has ease application. In spite of that, most chelators have adverse effects. For example; essential metal can loss, poor clinical recovery, non-specific binding, metal from intracellular sites can't be removed. Nevertheless it is very important to determine the need for more specific. Moreover, newer strategies should be investigated for better treatment. Such as combination therapy with lipophilic and a hydrophilic chelator, investigate roles of chelation in natural toxicokinetics may improve the therapeutic results.