

PATIENT INFORMATION SHEET

HEAVY METAL DETOXIFICATION PROGRAMMES

AT RESORT HEALTH

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INTRODUCTION -

In the industrialised world people have been exposed to heavy metals, often unknowingly. These heavy metals can contribute to health problems and they tend to accumulate and often are difficult to eliminate.

Heavy metals that we are interested in at our clinic are lead, mercury, cadmium and arsenic. We find high levels of one or multiple minerals in many patients who go through our assessment programme. Removal of the heavy metals is often seen as a very important part of any therapeutic programme. If the levels are high it may be the first and most important aspect of treatment.

Assessment of heavy metal status is usually done as a two stage assessment.

HAIR ANALYSIS -

The initial screening method for heavy metals is the hair analysis, this is used forensically (in crime scenes) on patients who die in suspicious circumstances. We at RESORT TO HEALTH use the hair analysis as a base line assessment for all minerals in the body and we look particularly at heavy metals in the hair.

The hair analysis has some fundamental problems. Hair is open to contamination from outside, so it is often difficult to establish whether the mineral in the hair comes from

inside the body or from an external source. Certain hair treatments such use lead as a basis for their treatments. Copper is present in water, so can read artificially high.

Sometimes we will see in the mineral analysis an excessive amount of mineral and on further testing we will find that it is not present in the body therefore it must be an external contaminate. Other times we will find small traces of heavy metal in the hair, but on further assessment we will find high levels of that mineral within the body.

HEAVY METAL CHALLENGE TESTS

Heavy metals can be removed from the body with agents called Chelators. A Chelator is a substance which will bind to the heavy metals, make it more water soluble and allow it to be removed through the kidneys and through the urine. There are a number of such heavy metal chelators and we use two in particular for our detoxification profile or heavy metal profile assessment. The first substance we use is DMPS, DMPS is used as an intravenous substance which is given over the course of 10-15 minutes.

Prior to the introduction of the administration of DMPS a patient is asked to pass a small amount of urine which is collected as a pre-test sample. DMPS is then administered followed by a small injection of saline and the patient is asked to drink between 500mls and a litre of water in the subsequent hour. At the end of that hour another urine sample is collected. The pre-test and post-test urines are sent to the laboratory for analysis.

DMPS is useful in assessment of mercury, cadmium, arsenic and lead. The results from the tests will take up to ten days. A positive result for mercury is calculated on a ten fold increase from the pre-test level to the post-test level or a level above 50mm pml. If the level is above this cut off point then the patient is advised to undergo specific mercury

detoxification. The type of treatment will be discussed once the results are known. Lead can be ascertained in the same way with similar cut off values.

EDTA (Ethylene-diamine-tetra-acetate) or Chelation Therapy is another chelating agent which is used widely amongst nutritional physician. The EDTA chelation process and the testing process is somewhat different from the DMPS. In this case we collect 24 hour urines prior to a EDTA challenge. Following the EDTA challenge the urine is collected for another 24 hours and sent to a laboratory for comparisons. EDTA will remove substances such as lead, calcium, cadmium and aluminium from the body. EDTA is not as good as DMPS in removing mercury.

Following the assessment EDTA and DMPS can be used as chelation treatment agents.

CONCLUSION: -

Heavy metal toxicity we believe is important aetiological factor in a lot of illnesses. Accurate diagnoses of levels of heavy metals in the body is paramount as failure to detect this may be a major factor in a person's illness. Hair analysis as a simple screening test and metal detoxification methods are used to ascertain the quantity of the heavy metal within the body. Once known, a suitable programme is developed for the removal of heavy metals in conjunction with other therapies.