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New development... New development...

Retinol Binding Protein or urinary RBP, a tubular proteinuria marker

RBP, a protein of a molecular weight of 21 kDa, is a transport protein for retinol (vitamin A) and circulates as a retinol-RBP-prealbumin complex. The unbound fraction (10% of RBP) is filtered by the glomerulus then re-absorbed by the proximal convoluted tubule where it is catabolised.

Urinary RBP is a tubular proteinuria marker like urinary α 1-microglobulin and urinary β 2-microglobulin. Combined assay can be carried out with albumin (= microalbumin), immunoglobulin G and urinary transferrin for specifying the type of proteinuria (selective or non-selective glomerular and/or tubular or mixed).

In **incomplete or transient** tubular proteinuria, only α 1-microglobulin is increased. A concomitant rise in urinary RBP indicates **complete** tubular proteinuria as found in cases of diabetes and in tubular defects of infectious, toxic, drug-related and metabolic congenital origin (cystinosis).

Urinary RBP presents an advantage compared to urinary β 2-microglobulin in that it remains stable regardless of urine pH and due to its relatively constant synthesis. The assay technique used however must be sufficiently sensitive (10 μ g/l).

Reference values: 10 – 540 μ g/l

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- IN PRACTICE -

- Sample: Urine sample from the second miction of the morning (5 ml)
- Storage: Refrigerated
- Assay method: ELISA
- Run frequency: 1/week
- Technical turnaround time: 1 day



Note...

N.B.:

Your correspondent number is confidential and must not be disclosed to patients under any circumstances.

New biologist

We are pleased to announce the arrival of Dr Hamid BELAOUNI, laboratory physician, specialising in onco-haematology.

He has just joined the Department of Genetics and you may contact him on:
Tel: 01 34 40 19 01

E-mail: hbelaouni@pasteur-cerba.com

CALENDAR of public holidays

**Friday 1 May 2009
& Friday 8 May 2009
& Friday 21 May 2009**

Our medical secretariat will be closed and there will be no sample reception on these dates.

Please do not carry out sampling on the days before the above holidays for any of the following analyses:

HLA Class I, lymphocyte sub-populations, cellular allergy tests, CMV blood antigens, lysosomal enzymes, constitutional karyotypes and all bone marrow analyses.

New development... New development...

Anti-gp210 and anti-sp100 autoantibodies for the diagnosis of Primary Biliary Cirrhosis (PBC)

The autoantibodies found the most frequently in Primary Biliary Cirrhosis or PBC are type 2 antimitochondrial antibodies, identified and characterised by IIF on triple substrate followed by the immunoblot test.

Detection of antinuclear antibodies in this context is also very important as 50% of patients with PBC present specific antinuclear antibodies.

Among these, two antibodies can now be specifically identified: anti-gp210 antibodies which show **membranous** or **ringed** fluorescence in the nuclei of HEp-2 cells and anti-sp100 antibodies which reveal a **multiple nuclear dot** pattern.

- Antimembrane antibodies (= nuclear envelope) can be directed against several targets: nucleoporin p62, lamins, LAP (lamin associated proteins), lamin B receptors and gp210, nuclear pore glycoprotein. Anti-gp210 antibodies have a sensitivity of 25 to 40% for PBC but their specificity is excellent (99%). They are highly useful in seronegative PBC as they are found in 50% of cases of PBC without type 2 antimitochondrial antibodies.
Where treatment with ursodeoxycholic acid is effective, these antibodies disappear.
- Multiple nuclear dot antibodies reveal 5 to 15 dots of varying size throughout the cells' nucleus excluding the nucleolus and do not mark the chromosomes during the metaphase (unlike anti-centromer antibodies). They match 2 targets: sp100, the most representative protein and PML (promyelocytic leukaemia) protein.
Anti-sp100 antibodies are found in 10 to 30% of PBC cases alone or combined with anti-gp210 antibodies. They are less specific to PBC than type 2 antimitochondrial antibodies and anti-gp210 antibodies and they can be found in other liver diseases and in various connective tissue diseases (systemic lupus and Gougerot-Sjögren syndrome, for example).

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- IN PRACTICE -

- Sample: 1 ml serum or plasma
- Assay method: Immunodot
- Run frequency: 1/week
- Technical turnaround time: 1 day

Web Focus... Web focus...

<http://www.pasteur-cerba.com>

- CATANACERBA

We would like to remind you that you may download our 2009 catalogue on CATANACERBA. CATANACERBA can be installed on your laboratory or company network. The application must first be installed on each user workstation by indicating the drive mapping and not the "C/" hard drive.

http://www.pasteur-cerba.com/log_catanacerba.cfm

- "Test Info"

We have compiled a new collection of scientific documents entitled "Test Info".

These documents present a summary of clinical and biological knowledge based on current medical topics or a public health concern:

e.g.: "Diagnosis of neurodegenerative diseases such as Alzheimer's disease and related diseases"

http://www.pasteur-cerba.com/04_01_dossiers_infotest.asp