NMT Bookshelf

RADIOASSAY IN CLINICAL MEDICINE

W.T. Newton and Robert M. Donati, eds, Charles C Thomas, Springfield, III, 1974, 187 pp, \$11.75.

Radioimmunoassay methods have become very popular in the last five years due their known sensitivity, their superiority over bioassay methods in their ability to determine small amounts of chemicals in a biologic system, and the availability of tritiated and iodinated radioactive labels. *Radioassay in Clinical Medicine* provides a well-rounded review of the applications, significance, and technical problems associated with currently available radioimmunoassay procedures.

The clinical radioassays discussed in this book include those used to measure antibody levels of human growth hormone, prostaglandin, digitalis and digoxin, thyroid hormones, and vitamin B-12. Each chapter is preceded by an introduction that describes the principles of the radioimmunoassay to be discussed, including production of antibodies, antibody-antigen reactions, and currently used radioactive labels. The book's organization is excellent, it boasts some very comprehensive reference lists, and its practice of comparing radioassay to bioassay methods and of discussing when appropriate cross-reactivity with chemically similar molecular structures will prove useful to many clinicians.

However, there are a few areas in the book one might disagree with. For example, Chapter 4 is concerned with the methods of measuring digoxin and digitoxin and indicates that the ⁸⁶Rb red cell uptake is the latest and most widely used method. Rubidium-86 red cell uptake is an extremely problematic procedure and contains many sources of error. No mention is made of iodinated digoxin or digitoxin, which are the most popular methods.

Otherwise, this book does an excellent job of surveying the current radioimmunoassay methods, and it should prove useful to nuclear medicine departments performing radioassay procedures. It should also prove to be a useful reference book in nuclear medicine technology training programs.

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