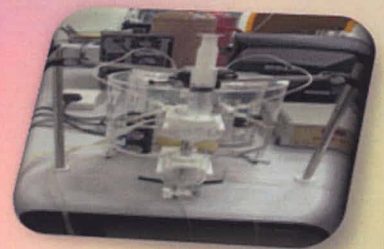
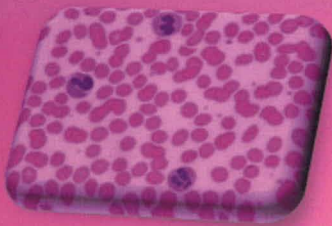


KULLIYAH OF DENTISTRY INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA



ESSENTIAL LABORATORY INVESTIGATIONS FOR DENTAL STUDENTS

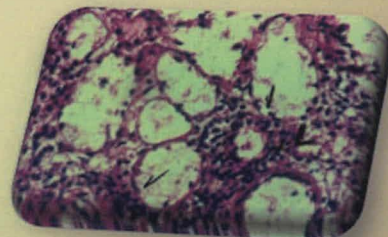
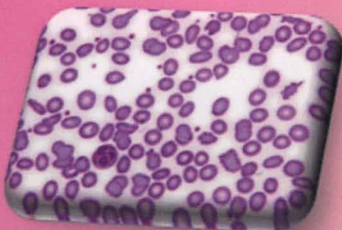


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CHAPTER TWO

Essential Diagnostic Physiology Tests

Dr. Muayad Salm Rahma

Human physiology is the science of the mechanical, physical, bioelectrical, and biochemical functions of humans in good health, their organs, and the cells of which they are composed. The biological basis of the study of physiology, integration refers to the overlap of many functions of the systems of the human body, as well as its accompanied form. It is achieved through communication which occurs in a variety of ways, both electrical and chemical.

In this chapter, we discuss the theory and practice of routinely used techniques in physiology as well as some equipment, procedures, and some of important clinical findings with which dentist or dental students need to be familiar.

2.1 Cardio-physiology

Our circulatory system is a closed circuit containing a pump (the heart) that serves to maintain a pressure gradient sufficient to sustain an effective blood flow from the distributing ducts or arteries to the thin vessels or capillaries and back through the collecting ducts or veins. Two circuits, the pulmonary and systemic are present. The pulmonary may be considered the low pressure circuit while the systemic is the high pressure one. Systemic arteries are mainly pressure vessels.