

STUDY OF CONSUMER ASPECTS AT CHOICE OF INSULIN PUMPS

Danileyko N. V., Bespalaya Yu. A.

National University of Pharmacy, Kharkiv, Ukraine

tovaroved@nuph.edu.ua

Introduction. Today society of not only our country but the whole world faces the problem of treatment of such disease as diabetes mellitus. According to WHO statistics every minute in the world dies more than 5 people and every year this number grows. And that is why for several decades are being developed new technologies and preparations, improving existing instruments to maintain the condition of a patient suffering from diabetes. One of the modern instruments is insulin pump (IP).

Aim. The study of consumer aspects of IPs.

Materials and methods. Modern range of IPs was analyzed. In our study, we have used a systematic and logical analysis methods.

Results and discussion. IP is an electromechanical device for subcutaneous administration of insulin is a compact automated individual dispenser. In its structure, it is a complex device that includes: a pump for the supply of insulin, as well as a computer with a control system; replacement tank for insulin (cartridge, inside the pump); a replaceable infusion set including a cannula for subcutaneous administration and a system of tubes for connecting the reservoir to the cannula; batteries. When choosing a PI for a modern consumer, it is very important to pay attention to the following aspects: a minimum dose of insulin (basal) in one hour; step of insulin delivery; the number of basal intervals and the minimum duration of the basal interval (defined in minutes); types of boluses (the presence of different modes of insulin administration for food intake); number of basal insulin profiles (indicates how many programmed basal insulin variants the pump can store in memory); system of informing about the errors that occur; memory; system of constant monitoring (allows to measure blood sugar level in real time and display the received data on the screen of the monitor as a graphic curve); a warning signal about too high and too low levels of glycemia; remote control (allows controlling the device without getting it from the usual location); automatic keylock (allows protecting the device from accidental clicks); the menu of the device (presence of the native language); connectivity with a personal computer; volume of the reservoir (reports the amount of insulin contained in the pump).

Conclusions: Proceeding from all above-stated, it is possible to tell with confidence, that for today, there is a wide spectrum of consumer aspects by which consumers at a choice of IP should be guided.