

Early Detection of Kidney Failure by Using a Distinct Technique for Sweat Analysis

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Abstract : Diagnosis by sweat is one of the emerging methods whereby sweat can identify many diseases in the human body. Sweat contains many elements that help in the diagnostic process. In this research, we analyzed sweat samples by using a Colorimeter device to identify the disease of kidney failure in its various stages. This analysis is a non-invasive method where the sample is collected from outside the body, and then this sample is analyzed. Urea refers to the disease of kidney failure when its quantity is high in the blood and then in the sweat, and by experience, we found that the amount of urea for males differs from its quantity for females, where there is a noticeable increase for males in normal and pathological cases. In this research, we took many samples from a normal group that does not suffer from renal failure and another who suffers from the disease to compare the percentage of urea, and after analysis, we found that the urea percentage is high in people with kidney failure disease. with an accuracy of results of 85%.

Keywords : sweat analysis, kidney failure, urea, non-invasive, eccrine glands, mineral composition, sweat test

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