



Investigation of the relationship between dialysis and complexion with Spectrophotometer series

Background

For many patients who have been treated with dialysis for many years, it has been confirmed that their complexions become dark brown and the reflectance of the skin surface decreases. The change of complexion is a serious problem for such patients. Because of this, a hospital which specializes in dialysis decided to investigate the change of complexion during dialysis treatment. This investigation requires that the change of reflectance of the skin surface be measured easily and accurately without disturbing patients.



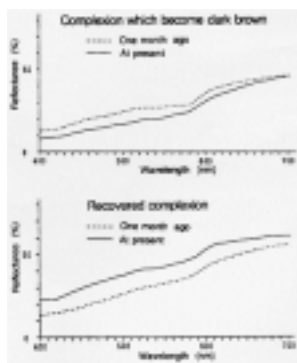
Dialysis treatment



Demonstration Measurement in the inside of arm

Outline of the measurement process

The color of human skin is also changed easily by suntanning. So the reflectance of the skin is measured at three points where suntanning usually doesn't occur: "the inside of the arm", "above the navel" and "the small of the back". From the measurement data, the relationship between the change of complexion and the dialysis conditions (the type of dialysis filter) and the hourly blood flow at present, the measurements are performed on 180 patients at three hospitals including this hospital every other month.



Results

- Quantification of the color is made possible by using the Spectrophotometer series. Also, quick measurements of the Spectrophotometer doesn't inflict any discomfort or burden upon patients.
- Because spectrophotometers are portable, the same instruments can be used by all three hospitals in turns.