

SALIVARY CORTISOL VALUES AMONG NURSES AT PATHOLOGY AND EMERGENCY DEPARTMENT

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OBJECTIVES

To see the difference between salivary cortisol values and correlation with the work stress.

METHODS

The salivary and serum cortisol values were analysed in two groups of nurses:

- six nurses in the emergency department
- and six nurses in the pathology department at our hospital,
- three female
- and three male for each group.

The samples were taken:

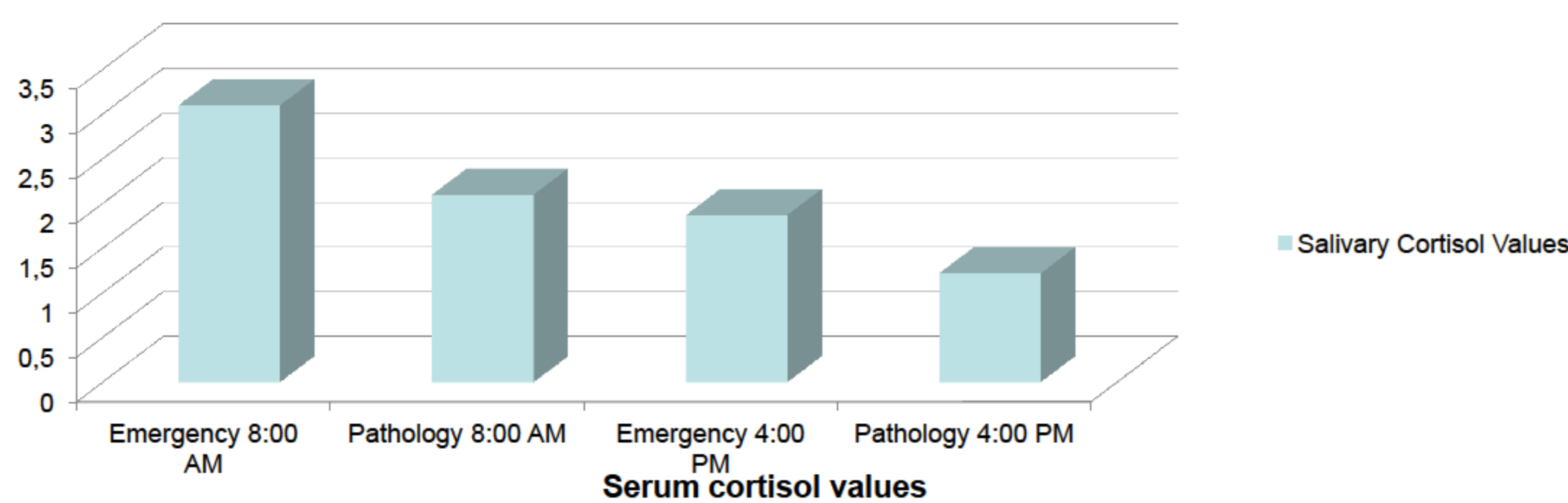
- before beginning the work
- and after finishing the work.

The cases respected all the rules for salivary testing of cortisol.

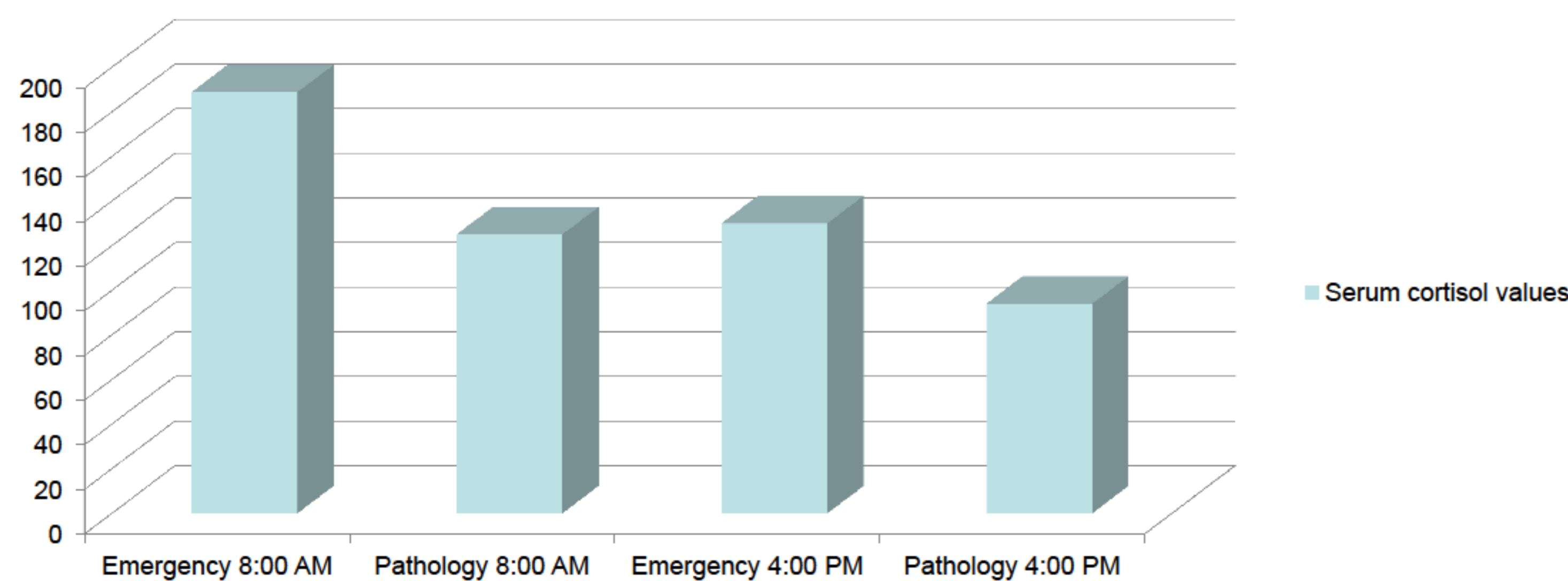
The average age of the participants was the same for both groups, 28.5 years old.

Graphs and tables

Salivary Cortisol Values



Serum cortisol values



RESULTS

In the emergency department:

Median serum cortisol values in the morning were 188,8 nmol/l (normal range 55-230) and median salivary cortisol values 3.1 microg/dL (normal range 1-11.3) At the end of work (4:00 PM) the values were: serum cortisol values 130.2 nmol/l (normal range 28-140) and salivary cortisol values 1.87 microg/dl (normal range 0.2-2.7).

In the pathology department:

In the morning (08:00 h) average serum cortisol values were 125 nmol/l and salivary cortisol values 2.1 microg/dL At the end of the work (4:00 PM): serum cortisol values were 94.0 nmol/l and salivary cortisol values 1.22 microg/dL.

CONCLUSIONS

Since the stress of work is higher in the emergency department, even the results of the salivary cortisol values were higher in the nurses of the emergency department compared to the nurse of pathology department and there existed a correlation between salivary and serum values, but the study needed a bigger group of nurses to have more trustful conclusions.

References

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