

PROLACTIN SECRETION PATTERN AMONG FEMALE FLIGHT ATTENDANTS

The aim of the study was to determine the incidence of hyperprolactinemia among female flight attendants and identify factors affecting prolactin secretion in flight attendants working within one time zone or on long-distance flights.

The cross-sectional study included 103 women aged 23-46 years. The study group (Group I) was divided into two subgroups: subgroup Ia consisted of female flight attendants flying within one time zone, while subgroup Ib included flight attendants working on long-distance flights. The control group (Group II) comprised reproductive-aged women seeking medical assistance for infertility issues caused by male factor infertility.

Various factors were assessed, including age, body mass index, menstrual cycle regularity, length of service, frequency of flying, prolactin, estradiol, and progesterone concentrations, as well as the result of endometrial biopsy. Descriptive and inferential statistical methods were used for data analysis.

The results revealed a significantly higher incidence of hyperprolactinemia among female flight attendants (46%) compared to the control group (9%), with a p-value less than 0.001. There were no statistically significant differences in prolactin concentrations between subgroups Ia and Ib ($p = 0.425$). Hyperprolactinemia was slightly more prevalent in flight attendants with over 15 years of service compared to those with less than 15 years (46% vs. 45%, $p > 0.05$). The frequency of flying (less than 60 hours/month vs. 60 hours/month or more) did not significantly affect prolactin secretion ($p > 0.05$).

In conclusion, hyperprolactinemia is more common among female flight attendants compared to the general population. However, high prolactin levels in flight attendants rarely manifest in clinical symptoms. The frequency of flying and length of service do not appear to influence the development of hyperprolactinemia or average prolactin concentrations.

BIOGRAPHY

My name is Małgorzata Radowicka, and I am a gynecologist. My interests are focused on hormonal issues and endometriosis. Last year, I completed my PhD which concerned hormonal disorders in flight attendants. I am currently an assistant professor at the Academy of Silesia in Katowice, and previously, I worked as an assistant at the Warsaw Medical University.