

## IS THERE ANY CORRELATION BETWEEN PRESENCE OF PROTEIN IN URINE AND PREMATURE GREYING OF HAIR?

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### Abstract

Usually follicular melanogenesis happens at the age of 45 years in which hair coloring pigment stops to work. But now environmental factors influence melanogenesis and cause premature greying in youngsters. Nutritional factors like deficiency of calcium, vitamin D also accelerate premature greying. To stop early follicular melanogenesis, supplements of vitamin D are used. Upraised level of proteins in urine caused proteinuria. It points out the indication of kidney illness. High blood pressure may also lead to proteinuria. Urinalysis was performed to indicate the relation between proteinuria and premature greying of hair. For this urine samples were collected, and dipstick test was performed. It was observed that almost 62% students were passing through early greying of hair. On the basis of observations, it was evaluated that 16% women and 18% men found protein in urine. Similarly, 46% female and 44% male found protein negative in urine test. We had recognized that there were limited number of students with canities and appeared protein in urine. While major students were those who had not monitored proteinuria in urine sample. So that we can say there is no compatibility between canities and proteinuria.

**Key Words:** Follicular melanogenesis, Proteinuria, Dipstick Method.

### Introduction

Normally follicular melanogenesis occurs at the age of 50 years in which pigment stops to work and hair color turns to white. But now due to some changing in environment it causes premature greying of hair in youngsters. That causes a discouraging effect and anxiety among young population and especially those who are affected by early greying of hair. It also impacts quality of life. Different medical therapies are available that proved helpful to reduce greying of hair. One of the most popular is use of melanocytes hormone for 4-6 months that restore natural pigmentation in affected person. Other nutritional factors like insufficiency of calcium, deficiency of protein in food, deficit of vitamin D also accelerate premature greying. Supplements of vitamin D can be used to restore the pigmentation. To avoid follicular melanogenesis in

early age it is important to ensure healthy diet. (Hill, 1980) Proteinuria mentioned as urine contains irregular amount of proteins. It indicates the sign of kidney illness. It may also spot from the over making of proteins by the body. Diabetes and high blood pressure are two foremost danger factors for proteinuria. Along these other reasons of proteinuria may include trauma, infection, toxins and immune disorders. (Goullé et al., 2005) Orthostatic proteinuria is a state when some person stimulates more protein into urine during standing. It is important to take medicine to cure chronic kidney disorder otherwise it may lead to kidney failure. ACE inhibitors (angiotensin converting enzyme inhibitors) and ARBs (angiotensin receptor blockers) are prescribed to the diabetes patient having proteinuria. (Schaub et al., 2004)

**Study Objectives**

The aim of this research is to identify the relation between urine protein and premature greying.

**Materials and Methods**

Urine test is used to confirm the presence of infectious particles in the body.

**Materials**

Gloves, reagent strip container, sterile pots, sanitizers, Urine sample

**Method**

**Collection of samples**

Urine samples were collected from 165 to 200 students of University. Almost 8ml to 10ml of urine was stored in small pots and named with student details.

**Dipstick Procedure**

A stick having the chemical reagents was dipped in the urine sample for 1 to 2 seconds. To avoid contamination of reagent chemicals strip was maintained in horizontal position. Then the color changes in strip was match with chart to indicate the amount of proteins in urine sample. Exact results were documented in the work sheet on the basis of remark. After documentation strip must be wasted.

**Results and Discussion**

When urinalysis was done it was observed that from 200 individuals, Table 1 shows that almost 62% students were facing early greying of hair. On the basis of observation of results, it was evaluated that 16% women found protein in urine. While 18% men found proteinuria. Similarly, it was also seen that 46% female and 44% male having canities but did not find protein positive.

**Table 1:** The relation of Urine Protein with Premature Greying of Hair.

GENDER	Premature greying of hair				NO premature greying of hair			
	Urine Positive	Protein	Urine Negative	Protein	Urine Positive	Protein	Urine Negative	Protein
Female	16%		46%		10%		28%	
Male	18%		44%		8%		30%	

**Conclusion**

The test was established to gain more knowledge about relation of premature greying with urine protein. As we know earlier that in canities proteins like keratin and melanin starts to degrade. We observed that there were less number of students having canities and protein positive in urine. While more students were those who had not observed proteinuria in urine sample. So that we can say there is nothing between the urine proteins and canities.

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