HOW BODY TEMPERATURE RELATES WITH DANDRUFF?

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ABSRACT

The main objective of this article was to harmonize normal body temperature with dandruff in hair cells. Body temperature is the percentage of heat content present in the body required for normal functioning of body fluids. Dandruff is the process of shedding of dead skin cells from scalp surface as white dots which are regarded as dandruff. The article explains body temperature and dandruff and there relation. Samples of 150 students were taken who answers in terms of giving body temperature with respect to having or not having infected with dandruff. These students belong to Bahauddin Zakariya university, Multan, Pakistan. It was concluded that male and female with elevated temperature have more risk of dandruff.

Keywords :Hypothermia, Hyperthermia, heat stroke, digital thermometer and dry scalp.

No: of Tables: 1 **No: of References: 13**

INTRODUCTION

Body temperature is the percentage of heat content present in the body required for normal functioning of body fluids. Body temperature is the capability of body to maintain a balance between heat gain and heat loss mechanism of body. Normal body temperature of human body ranges from 36-37.2 C° or in Fahrenheit 98.6 C°. Primary source of heat for human body is the sun and then from food contents. Human body temperature at optimum value is necessary for the normal functioning of hormones, enzymes, neurons and metabolism. The factors that influence normal body temperature are age, exercise, sex factors, emotions, hormones, heart rate, metabolic rate, infections, use of drugs like sedatives, anti-depressants and cardiovascular drugs. Body temperature is measured from areas like abdomen, rectal, temporal artery and under tongue from various types of thermometers like digital thermometer, mercury glass, infrared thermometer, chemical disposable thermometer and temporal artery thermometer. The purpose of body temperature measurement is for the detection of abnormal conditions of body when it exposed to extreme heat and cold like fever, hyperthermia, hypothermia, cardiac fibrillation and heat stroke. Hypothermia is a condition at which body temperature decreases to about 34-36 C° in which hypothalamus the thermoregulatory centre of body or thermostat unable to regulate body temperature. Fever is a condition at which body expose to mild hot, temperature increases to 37 C° but fever is beneficial for host as it activates the thermoregulatory activity of hypothalamus as pyrogens or infectious agents like endotoxin produce by salmonella typhae reset the thermostat at high temperature. Hyperthermia is a condition of rise in body temperature up to 38-40 C°. While heat stroke is the elevated body temperature about 40-44 C° when exposed to extreme heat initially causing symptoms like dizziness, vomiting, abdominal distress and sometimes death. So, to maintain body temperature at optimum value there should be a balance between heat production and heat loss mechanism. When temperature of body is too high, then preoptic and anterior hypothalamic centre works for heat loss mechanism by sweating, decreasing metabolic rate, heat loss by conduction, radiation and convection. But when temperature of body is too low, posterior hypothalamus activates heat production mechanism, activates heat conservation mechanism, shivering of body and increasing metabolic rate. (1)

Dandruff is the process of shedding of dead skin cells from scalp surface as white dots which are regarded as dandruff. The branch of science that studies dandruff, its signs, causes and treatments is known as dermatology. Dandruff starts from adulthood and lasts long if un-treated. About half of the people are affected by dandruff. Signs and symptoms of dandruff include itchiness, scaling of scalp, redness, dry skin, yellowish scaly patches and inflammation. Causes may be environmental changes, pollution, diet not

containing essential nutrients like zinc and vitamin B, taking stress weakens immune system of person so body become susceptible to dandruff, not shampooing for a long period, growth of a yeast-like fungus malassezia which lives on the scalp surface increases skin cells growth then extra skin cells begun to shed as white dots regarded as dandruff, age is also a factor, maleness is also a factor as male hormones provide condition for growth of fungus, some illness like HIV infection or other diseases also weakens the body making it susceptible and over-use of hair products, hair gels and hair sprays are the main causes of dandruff. Cradle cap is a condition of dandruff in infants. Cradle cap shows its symptoms from the very two months and lasts for a week or a month in new-born Childs. Other condition is seborrhoeic dermatitis with symptoms like scaling and itchiness. Areas of body that are mostly susceptible to seborrhoeic dermatitis are the face, scalp, chest and the ears. Dandruff is treated through anti-dandruff shampoos and through home remedies. Anti-dandruff shampoos include those shampoos whose special ingredients are zinc pyrithione and salicylic acid. Zinc pyrithione usage reduces itchiness, flaking and scaling production while usage of salicylic acid improves hydration of scalp. Home remedies include usage of garlic paste as garlic has anti-fungal properties, garlic is rich in vitamin C, it also improves hydration of scalp and promote hair growth. Apply Tulsi improves blood circulation in head provide relief from itchiness and inflammation. Apply onion paste is also effective against dandruff as onion has anti-bacterial properties, it reduces infection and helps in hair growth. Lemon is effective due to its acidic nature, it balances pH of the scalp. Lemon is also having anti-fungal properties. (2)

The main objective of this article was to harmonize normal body temperature with dandruff in hair cells.

MATERIALS AND METHODS

Method for the measurement of body temperature by the use of digital thermometer.

First of all, disinfect the end of digital thermometer for the measurement of accurate body temperature and prevention from any other infection if thermometer is used before. Now take the auxiliary temperature from the armpit and wait until you hear the sound or beeps. Then digital thermometer gives the reading of body temperature in digits. Rectal temperature can also be measured by digital thermometer.

Statistical analysis

Statistical analysis was prepared on Microsoft Excel worksheet.

Project designing

Samples of 150 students were taken who answers in terms of giving body temperature with respect to having or not having infected with dandruff. These students belong to Bahauddin Zakariya university, Multan, Pakistan.

Body temperature(Mean± SD) and susceptibility	Body temperature(Mean± SD) and resistance
36.8 ± 1.08	37.04 ± 0.06
$P > 0.05$ data is non-significant	$P < 0.05$ data is significant

RESULTS AND DISCUSSION

Table NO: 01 relates Normal body temperature(Mean ±SD) with dandruff.

According to Table No: 0, male and female that have temperature 0.06 plus or one minus from 37.04 have more chances of dandruff. Though dandruff starts from adulthood, but heat can dry the skin scalp and thus contributing to dandruff conditions. So, it can be say that male and female with elevated temperature have more risk of dandruff.

Conclusion

It was concluded that male and female with elevated temperature have more risk of dandruff.

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