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Why is Gold Forbidden for Men in Islam? An original study

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Abstract

Background and Objectives: According to Islamic doctrines, the use of gold for men has been banned. In general, any advised subject in Islam is useful for the body and what has definitely forbidden for a man is definitely harmful for him although its reasons have not been exactly specified. However, Muslims believe that there is certainly a sound reason behind this prohibition. This issue was studied in vitro on fertile men in the city of Babol by means of gold Nano particles.

Methods: A total seminal fluid from 20 healthy individual volunteers from the city of Babol whose fertility had been approved was examined for the gold content through atomic absorption at the wavelength of 242.8nm with Hollow gold cathode lamp. Prior to analyzing all the collected samples, they were put into a mixture of thick citrate and per chloric acids at a ratio of 1 to 6.

Results: In the samples studied, the amount of gold in the semen was found to be in the range of 0.32 to 1.92 µg/ml with a mean value 0.89 µg/ml and the standard deviation of 0.61µg/ml.

Conclusion: In the present study, the existing gold in the full seminal fluid was estimated after complete digestion. (oxidation of organic materials; so the amount of identified gold and the plasma levels of semen were separated like sperm). Therefore, the hypothesis of the presence of gold in sperm seems to be true. Due to the scarcity of articles in this regard and the previous studies, it seems that more studies are needed in order to shed light on the role of the gold on men's fertility. From the viewpoint of Islam, this study proved the presence of gold in seminal fluid. In addition, the decrease in sperm movement after the influx of gold shows the forbiddance of old for men.

Keywords: Gold, Islam, Nanoparticle, Semen, Spermatozoa

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Introduction

As is known, Islam has forbidden the use of gold for men and it has been introduced as a forbidden practice. However, women have been allowed to wear gold. According to recent studies, the number of white blood cells in men is more than that in women. Meanwhile, men's contact with gold increases the number of white blood cells. Naturally however, with the increase in the number of the white blood cells, the space for red blood cells and the number of them decrease to a noticeable degree. In fact, the use of gold in men disrupts the balance between white and red blood cells (1). This will lead to occurrence of anemia in men and on the other hand, will cause blood cancer. All of the disruptions occur in the blood cells of men's bodies. But a question may arise here; why can women use gold? If gold impacts the blood cells of men, women must not be an exception to this. It should be said that studies carried out on women's

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body structure have shown minor differences between the body structure of males and females. Gold contains rays which pass through body skin and influence blood cells. This is quite true for men (2). But it does not apply to the women because there is a layer of fat between the skin and flesh in women, which does not exist in men. It is this fat layer which guards against the penetration of harmful rays of gold into women's bodies. As such, one of the harmful effects of using gold by men is its the negative effect on their blood cells. Gold has played a significant role in human beings' health and various Iranian scientists have had their views on its healing properties. (3) .According to Avicenna and Abu Raihan, gold invigorates the heart and has a warm and moist nature. In addition, it is believed that the blackening of gold ring on a person's finger can be a sign of disease. With this background the present study aimed to estimate the gold content in the total seminal fluid by atomic absorption spectrometry in order to scientifically demonstrate forbidden aspect of using gold by men.

Methods:

20 healthy volunteer men aged between 27 to 40 years, whose their fertility had already been proved, were chosen for the purpose of this study. None of these men has been hospitalized for whatever reason and had not received gold for treatment in any form. Semen samples were collected after abstention during 9-11 in the morning, with the condition that none of the participants must have had any gold ring on their fingers during collection and analysis of samples. Manual semen analysis was done on the basis of established standards of World Health Organization. Manual analysis of the sperm includes different sectors like seminal fluid separation and comparison. The motility was used to determine the quality of sperms, which has five calibrations. Level zero does not show ant motion (resident). Level 1 indicates slow motion or motion without progress. Level 2 points to slow sperm motion which passes a complicated route to progress forward. Level 3 indicates the sperm motion in a straight line at rather average speed and level 4 shows the sperm movement in a straight line at a high speed.

After registering their physical properties, the sperms were allowed to turn into liquid at the room temperature. The motility and number of sperms were recorded and then the samples transferred below for more processing.

To estimate gold in semen samples, the samples were transferred in ice- cooled box to the laboratory. There, 10 ml of a mixture of nitric acid (BDH-AR) 16 N and concentrated per chloric acid (BDH-AR) were added to the semen samples at a ratio of 6 to 1 (same as the study by Jain et al) (4). The samples were kept there for one night in order for partition to completely happen. On the following day, the mixture was solved in 6ml of N/10 HCL at a temperature c° 70 for all acid to vanish and gradually cool the remaining material. The amount of gold levels was measured by the atomic absorption spectrophotometry in standard conditions so as the results be measured in µ/ml. The results were read at a wavelength of 242.8nm. The light source was a Cathode hollow gold lamp and the oxidizing air acetylene flame (blue) was utilized.

In the present study gold nanoparticles were produced by physical methods invented in Sharif University. This method is called the electrical explosion of wire. Generally, in this method Nano particle production mechanism functions in such a way that the high voltage electricity enters a thin wire with a diameter 0.1mm and causes the explosion of electrical wire changing it to plasma and finally metal nanoparticle. In the gold Nano-colloid used in the project, surfactant phosphate was added to solution before the production. The size of existing gold Nano-colloid was 50 nm with 7000 PPM or 7000mg/ml concentration which had been purchased from PNF Company.

A mixture of 700 µL of gold nanoparticle solution and semen was prepared. Motility and morphological changes were studied after 15 minutes by using clinical microscopic technique with robust power. As a control, motility and morphological changes of sperm were studied without the addition of gold nanoparticle solution. The studies were performed in the Laboratory of Dr Safiri (Babolsar, Iran). During

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analysis of samples, the standard solution was analyzed and compared with the samples at the beginning and end of the process and at intervening periods in order to ensure the accurate functioning of the machine.

Results

Gold was observed in the analysis of all samples of seminal fluid in the range of µ g/ml 0.32 to 1.92 µ g/ml with the estimated mean of 0.89 µ g/ml and the standard deviation of 0.61. The findings of this research have been presented in table 1. The volume of accumulated seminal fluid was 2 to 4 ml and the time interval for it to change into liquid was 10 to 20 minutes. The number of counted sperms have been was 96 to 164 and the level sperm motility was found to be 75% to 95%. In all samples white and stickiness and was zero and in the microscopic study they are not common.

Discussion & Conclusion:

The effect of environmental pollutants on sperm quality has been well known, but that of Nano particles has not been elucidated yet. Ben-David Makhluf et al. (5) performed a study to test the effect of magnetite nanoparticles and found that penetration of magnetite nanoparticles into sperm cells can be visualized. Gold nanoparticles are used widely in industry and science.

In the present study, gold was present in very small particles, about 50nm, deposited on surfactant phosphate after complete digestion (oxidation of organic matters); hence, denoting the amount of gold detected in seminal plasma as well as the sperm itself) in whole semen (seminal plasma and sperm). The mean value of semen gold was found to be 0.89 µg/ml (SD ± 0.61), which is quite high when compared with the results of Skandhan (5). Here it must be noted that Skandhan in his study had not included the sperm and did not mention the digestion procedure (i.e. to convert all

Table1. Seminal fluid characteristics and the amount of observed gold in it

amount of gold has been observed (µ g/ml)	Motility (%)	Number of sperm (million/ml)	Liquefaction time (min)	volume (ml)
0.36	80	104	15	2
1.92	80	112	20	3.5
0.96	75	112	20	3
1.68	75	98	10	2.5
0.66	85	108	15	4
0.66	80	108	10	4
0.66	90	154	10	3
0.36	90	96	15	2.5
0.34	95	120	10	3
1.78	80	118	20	2.5
0.68	85	98	15	3.5
0.72	80	108	15	4
0.98	75	110	20	3
0.68	80	164	10	2.5
1.82	75	96	20	4
1.32	80	142	15	3
0.76	80	104	10	3
0.78	85	142	10	2.5
0.32	95	118	15	2
0.36	80	164	10	3
Not detected	Blank (solvent distilled water)			

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organically bound gold into inorganic forms which is the detectable form), which could be the possible cause of the high values of gold in our study. It seems that the hypothesis made for presence of gold in sperm might be true. However, no systematic studies of gold nanoparticle in healthy sperm men have been reported. We demonstrated in a small, preliminary study that the motility of healthy sperm was affected by the presence of gold nanoparticles. This differs from the case of magnetite Nano- particles (6). We also noted that gold particles can penetrate sperm cells, which could result in fragmentation (7). However, the literature available in this regard is very scanty and further studies are needed for scientific documentation of gold in male infertility.

References

1. Babaee S. Gold Determination In Blood And Urine Using Atomic Absorption In Tehran Citizens. Rahavarde Danesh magazine. 2001;3:36-42. [Persian]

2. Malekzadeh shafaroudi M. Gold measured In Human Biological Fluids. Journal of Mazandaran University of Medical Sciences. 1995;5(10):74-80. [Persian]

3. Moghaddam A, Karimpoor Malakshah A, Talebpoor Amiri F, Taringou F. The Prevalence of infertility in central region of Mazandaran province in 1999. J Mazandaran Univ Med Sci. 2000;10(27):12-8. [Persian]

4. Jain V, Rai A, Misra S, Singh KM. Seminal gold content in healthy fertile men in India. Int J Ayurveda Res. 2010 Jul;1(3):172-4.

5. Skandhan KP. Gold in human semen. Andrologia. 1981 Jan-Feb;13(1):78-82.

6. Ben-David Makhluf S, Qasem R, Rubinstein S, Gedanken A, Breitbart H. Loading magnetic nanoparticles into sperm cells does not affect their functionality. Langmuir. 2006 Nov 7;22(23):9480-2.

7. Manin O, Nikolaev VA, Kolomiĭtsev AA, Lebedenko IIu. Comparative toxicological evaluation of domestic golden alloys for soldering. Stomatologiia (Mosk). 2007;86(1):64-7. [Russian]