



### To analyse the scientific approach of the origin of poison

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#### ABSTRACT –

Agadtantra is one of the branch of Ashtang Ayurved , where Visha, its origin, characters, signs and symptoms of poisoning, treatment with the help of different agadas are mentioned. Origin of Visha has explained by different acharyas by different way like Samudra manthan, a demon called Kaitabh etc. Also In other countries , origin of poison is by different way. Now we all have to analyse on all these aspects said by previous acharyas and even in other countries. We have to think whether it could be possible scientifically and practically. Concept of Origin of earth by modern science plays very important role to understand this. We should think that really churning of ocean is possible . We need to view the scientific approach of this thing .According to that this story seems to be mythological. We have to go with the time change and accepting the scientific facts.

**KEY WORDS:** Visha, Origin , Samudramanathan, Mythological, Churning of ocean.

#### INTRODUCTION –

Agadtantra is branch of Ayurveda which deals with the diagnosis, suppression of pain and treatment of influence of poison through bites of snakes, insects, spiders etc. or consumption of natural, artificial and mixed poisons. The word made up of 2 parts Agada & Tantra. In that Agada means opposite to poison (antidote) and Tantra means science. In modern science it is known as Toxicology. Toxicology deals with diagnosis, symptoms and treatment of poison and the methods of defeating them.

According to Ayurveda, the word "Visha" is derived from the root "Vis", which means to encompass, to get fully pervaded or to get occupied.

The substances which, immediately after entering into the body cause vitiation of health tissues or death of a healthy person, are defined as “poison.”

The substances which cause sadness to the world are called as “poison”

**Synonyms of poison :-** Gara, Garal , Gada, Mugar, Kalkutta, Aami, Kalkalp.

#### **Definitions of poison :**

- A substance which on ingestion, inhalation, absorption, application, injection, or development within the body, in relatively small amounts produces injury to the body by its chemical action.<sup>1</sup>
- Broadly speaking a poison may be defined as a substance of nature of a drug which is administered in way and in an amount in which it is likely to be administered, will produce deleterious effect of a serious nature.<sup>2</sup>
- A poison is commonly defined as a substance which when administered, inhaled or swallowed is capable of acting deleteriously on the body.<sup>3</sup>

#### **AIM AND OBJECTIVES –**

To study and analyse the scientific approach of the origin of poison

#### **REVIEW OF LITERATURE -**

#### **SAMUDRA MANTHAN -**

The churning of the Ocean of Milk was an elaborate process. Mount Mandaranchal was used as the dasher (churning tool), and Vasuki, the king of serpents, became the churning rope.

The gods held the tail of the snake, while the demons (Asuras) held its head, and they pulled it alternately causing the mountain to rotate, which in turn churned the ocean. However, once the mountain was placed on the ocean, it began to sink. Vishnu in his second incarnation, in the form of a turtle Kurma, came to their rescue and supported the mountain on his back.

During the Samudra Manthan by the gods and demons, one of the products emerged from the churning was a dangerous poison (Halahala). Shiva swallowed the poison in an act of self-sacrifice. It changed the color of Shiva's neck to blue. So he was called Nilakanta. When the heat from the poison had become unbearable Shiva is supposed to have used his trishul to dig for water forming the Gosaikunda lake.

All kinds of herbs were cast into the ocean and fourteen Ratnas (gems or treasures) were produced from the ocean and were divided between asuras and gods.

Halahala, the poison swallowed by Shiva.

Uchhaishravas, the divine 7-headed horse.

Kaustubha, the most valuable jewel in the world, worn by Vishnu.

Lakshmi, the Goddess of Fortune and Wealth - Vishnu's consort.

Chandra, the moon which adorned Shiva's head.

Apsaras, various divine nymphs like Rambha, Menaka, Punjikasthala, etc.

Kamadhenu or Surabhi, the wish-granting divine cow.

Parijat, the divine flowering tree with blossoms that never fade or wilt, identified with Kalpavriksha, the wish-granting tree.

Airavata, the elephant of Indra.

Dhanvantari, the doctor of the gods with Amrita the nectar of immortality. (At times, considered as two different Ratnas).

**List is completed by adding the following Ratnas**

- *Sharanga, - The bow of Vishnu.*
- *Shankha - Vishnu's conch*
- *Jyestha - the goddess of misfortune*
- *The umbrella taken by Varuna*
- *The earrings given to Aditi, by her son Indra*
- *Tulasi plant*
- *Nidra or sloth.*

#### **According to Charaka,**

During the churning of the ocean by the gods and the demons for obtaining nectar, a ferocious looking person had come. Person who was resplendent with aura, and who had four fangs, tawny hairs and fiery eyes emerged. The world became despaired (Vishanna) at his sight so he was called as "Visha" (poison). It resembles fire.

Lord Brahma deposited the poison in animals and vegetation.

Charak also describe Gara visha means chemical poison slowly acting on body.<sup>4</sup>

#### **According to Sushruta,**

A demon called Kaitabha, out of his ego, created many obstructions during the creation of the cosmos by its originator Lord Brahma.

Lord Brahma got angry and changed into of a dreadful person who killed the demon.

Then the anger continued to increase profusely and created sadness and depression among the gods. So the term Visha (poison) is called so for filling the gods with Vishada (depression/sadness). Soon after the completion of the Creation, the Creator Brahma cast the Visha into animals and plants for the benefit of the Creation.<sup>5</sup>

#### **According to Vagbhat,**

At the time of samudra manthan, Satva (like Krodha) had come.

It is reddish brown in colour and it resembles fire. As soon as he come, he wish to burn the whole world. Lord Brahma counceled him in order to make nector, Brahma converted him into medicines.<sup>6</sup>

#### **According to Bhagwatpuran,**

When Lord Shiva was drinking visha, at that time some drops were felled down to earth. By drinking these drops snakes, scorpions like other animals become poisonous.<sup>7</sup>

## HISTORY OF ORIGIN OF POISON IN OTHER COUNTRIES –

The early history of poisoning is very much intertwined with mythology and belief.

As early as 2500BC, the Sumerians worshipped a goddess of poisons called Gula, who was also regarded as the mistress of charms and spells.

### GREEK MYTHOLOGY

- Among which is the story of Medea, granddaughter of Helios the sun god, who made a failed attempt to trick her husband Aegeus into killing her stepson Theseus (Aegeus's son) with poisoned wine by claiming the latter was an enemy and pretender to the throne. At the last moment, however, Aegeus recognised Theseus's sword, and dashed the goblet from his son's lips.
- Egyptian pharaoh, Menes, studied the properties of poisonous plants and venoms, according to early records.<sup>8</sup>
- An ancient alchemist, Agathodiamon (100BC approx.), who spoke of an (unidentified) mineral that when mixed with natron produced a 'fiery poison'.
- They have come into knowledge about elements such as antimony, copper, crude arsenic, lead, opium and mandrake (among others). Other such secrets were revealed in papyri.
- Cleopatra is said to have poisoned herself with an asp after hearing of Marc Antony's demise. Prior to her death, she was said to have sent many of her maidservants.

- A bust of the Roman Emperor Nero, who used cyanide to dispose of unwanted family members.
- Poisoning was occurring on the dining table in eating and drinking food material.
- Nero's predecessor, Claudius, was allegedly poisoned with mushrooms or alternatively poison herbs.
- Halotus, his taster, Xenophon, his doctor, and the infamous poisoner Lokusta have all been accused of possibly being the administrator of the fatal substance, but Agrippina his final wife, is considered to be the most likely to have arranged his murder.

### CHINA

- Around 246BC, the Chinese developed a drama form known as the Chou Ritual, which comprised six ceremonial dances carried out with feathers.<sup>9</sup>

The ritual involved the burning of five poisons: cinnabar (mercury), realgar (arsenic), green vitriol (coppersulphate), lodestone and an unknown poison — and the catching of the fumes on a bunch of feathers for external use.

### PERSIA

- The Persians were similarly interested in poisons, as shown by Queen Parysatis who, during the reign of Artaxerxes II (405 - 359BC), demonstrated her love for her daughter-in-law Statira by poisoning the knife used to carve a bird at her dinner table.<sup>10</sup>

**Is there story of origin of poison in other ancient civilizations? - NO.**

Any other ancient civilization does not show story like samudra manthan but they have origins of some poisonous creature, or poison was created by them.

So, we are going to see some mysterious humanatoid creatures like Devil as we see some very poisonous Rakshsas in Puranas.

### **Gog and Magog**

Gog Magog appear in the Quran, their existence is accepted by many religions including Islam, Christianity and Judaism as “evil and destructive nature”

### **Dziwożona**

They are known for being malicious and female swamp demons in Slavic mythology dangerous. They had huge breasts used for attack & murdering

### **Banshee**

A female spirit in Irish mythology, usually seen as an omen of death and a messenger from the Otherworld Her mourning call is heard, usually at night when someone is about to die and usually around woods.<sup>11</sup>

### **Mermaid**

Mythological aquatic creature discussed since 5000 BC. There is a confusion that they are Sirenas (aquatic animals) or a congenital disease Sirenomelia (aka mermaid syndrome in which a child is born with his or her legs fused together).

### **Abatwa**

In Zulu mythology, Abatwa are tiny humans said to be able to hide beneath a blade of grass and to be able to ride ants. If

a pregnant woman in her seventh month of pregnancy sees a male Abatwa, it is said that she will give birth to a boy.<sup>12</sup>

### **Elf Cyclops**

In Greek and Roman mythology, a cyclops is a member of a primordial race of giants, each with a single eye in the middle of its forehead. It may be congenital abnormality called Cyclopia in which the human baby is malformed having only one central eye.

Germanic mythology, the elves were originally thought of as a race of divine or semi-divine beings endowed with magical powers, which they use both for the benefit and the injury of mankind.

### **Tiyanak**

Philippine mythology, imitates the form of a child. newborn baby cries like one in the jungle to attract unwary travelers. Tianak may be the spirit of a child whose mother died before giving birth.<sup>13</sup>

### **Yeti or snowman**

Mythological humanoid creature said to inhabit the Himalayan region of Pakistan and Nepal. The scientific community regards Yeti as a legend, He had an interesting feature of changing his hair colour in sunlight to fox red.

### **Fomorian**

In Irish mythology, were a semi-divine race preceded the gods, similar to the Greek Titans. They represent the gods of chaos and wild nature

## **Werewolf**

Mythological human with the ability to shape shift into a wolf or an anthropomorphic wolf-like creature. This transformation is often associated with the appearance of the full moon

## **Mono Grande**

Ape-like hairy and men-like torso-ed cannibals And on encounter they attack humans on sight but might carry off women for breeding.

## **Vampires**

Mythological beings who subsist by feeding on blood of living creatures . bloodsucking demons is as old as man himself, and may go back to prehistoric times. There is no scientific evidence of vampirism except the Vampire Bat.

## **Ogre**

Greek mythology ,he was the son of Greek blood shedder god. The French tale tells of them as habitants of kingdom of Logres [England].

## **KAPRE**

Philippine mythical creature as a tree demon, but with human characteristics .

The word comes from the Arabic “kaffir” meaning a non-believer in God. apres may make contact with people to offer friendship, or if it is attracted to a woman.

## **Abarimon**

An legendary race with backwards feet, but in spite of this handicap were able to run at

great speed. lived in a great valley of Mount Imaus (now called the Himalayan Mountains in Pakistan).

There was a special quality of air which meant if it was breathed for a long period of time it would be impossible to breathe any other type of air and the inhabitants could never leave the valley ali

**Is mythological origin of Earth is really true?? -**

## **Origin of earth by modern science –**

According to the Big Bang Theory, the universe originated in an enormous explosion.<sup>14</sup> The Earth involves a spinning cloud of dust called a solar nebula. All of the matter and energy now in the universe was contained in a singularity. A singularity is a point with an extremely high temperature and infinite density.

This singularity floated in a complete vacuum until it exploded, flinging gas and energy in all directions. As the gas from the explosion cooled, various physical forces caused particles to stick together. As they continued to cool, they slowed down and became more organized, eventually growing into stars. About five billion years ago, some of this gas and matter became our sun. At first, it was a hot, spinning cloud of gas that also included heavier elements. As the cloud spun, it collected into a disc called a solar nebula. Our planet and others probably formed inside this disc. The centre of the cloud continued to condense, eventually igniting and becoming a sun.

4.6 billion years ago, the Earth formed as particles collected within a giant



disc of gas orbiting what would become our sun. Life first arose from nonliving matter around 3.7 billion years ago. There's no concrete evidence for exactly how the Earth formed within this nebula.

Scientists have two main theories. Both involve accretion, or the sticking together of molecules and particles.

### **Homogenous accretion:**

Similar elements stick together, creating a solid mass. The heat generated in this process melts the particles. The heavier elements sink to the center because of gravity, creating the Earth's solid core. Outgassing from this solid body creates the atmosphere.

Similar elements stick together. 2. Heavier particles sink toward the center of the mass. 3. Outgassing creates the planet's atmosphere.

### **Heterogeneous accretion:**

First, particles of metal stick together, creating the Earth's core. Lighter elements stick to this core as it continues to cool. The gravity of this mass attracts most of the atoms that make up the atmosphere.

1. Heavier elements collect in the nebula.
2. Lighter particles adhere to this mass.
3. The atmosphere comes from outgassing and the collection of gaseous particles.

4.6 billion years ago, the Earth formed as particles collected within a giant disc of gas orbiting a star. Once the sun ignited, it blew all of the extra particles away, leaving the solar system.

At first, the Earth was very hot and volcanic. A solid crust formed as the planet cooled, and impacts from asteroids and other debris caused lots of craters.

As the planet continued to cool, water filled the basins that had formed in the surface, creating oceans. As with *evolution*, the Big Bang Theory has caused some controversy.

Here are a few of the reasons scientists think it's accurate:

All of the matter in the universe is moving away from all the other matter at a very fast rate. Scientists have proven this by measuring stars' Hubble red shift, or how light waves get stretched out as they rush away from us. Scientists can detect and measure low-level radiation called cosmic microwave background (CMB). It is the oldest light in the universe. This seems to be an aftereffect of the Big Bang. New analysis of the CMB suggests that the universe changed from a microscopic point to an enormous system in a fraction of a second.

Colors indicate "warmer" (red) and "cooler" (blue) spots. The white bars show the "polarization" direction of the oldest light. This new information helps to pinpoint when the first stars formed.

"Poison could have set the stage for the origins of life?"

The story begins with speculation that formaldehyde may have made up some of the "fabric" of the early bodies of the solar system – asteroids and comets.

The only observational evidence in the story is that formaldehyde is found in interstellar

space by its spectrum, and that researchers at the Carnegie Institution under George Cody were able to create one organic solid similar to one in a certain kind of meteorite starting with it. This mineral was also similar to material found in Comet Wild-2, samples of which were analyzed by the Stardust spacecraft. They tested their conclusion with experiments to reproduce the type of organic matter found in carbonaceous chondrites, a type of organic-rich meteorite, starting with formaldehyde. Their results make sense, because formaldehyde is relatively abundant throughout the galaxy and the polymerization process would have been possible under conditions of the primitive solar system.

## **DISCUSSION –**

### **Scientific approach of origin of poison –**

### **Churning of ocean ? How can it possible ?**

### **Mandar Mountain –**

As we know ocean is very much tremendous in size .We don't have proof about existance of ocean of milk. Is Mandar mountain is really present at the centre of the kshirsagar? As that mountain is used as dasher in the churning of ocean we can imagine how much large and wide it was! Because for churning of ocean mountain should be expandable in size.

Is there any mountain present which can move around itself?

### **Vasuki Nag -**

According to modern science, length of the snake is 16-18 feet, Anaconda have a

length about max 30 feet. Then how can a snake rolling around the mountain as its length is too short.

If snakes are present before samudra manthan then how can it possible to poison be formed end result of churning of ocean?

If churning of ocean is occurring then it is possible to Dev & Danavas to stay in it?

Vasuki Nag is living & Mandar mountain is non living then how it is possible to move a large mountain with the help of any living thing.

### **Halahala Visha,-**

What is the quantity of visha coming out from churning of the very huge ocean? Lord Shiva drinks the whole visha generally we didn't see any being who can drink the visha and still live. As he drinking a bucket of visha how could it not show any poisonous effect? We know the fatal dose of poison.

That was not showing any poisonous effect then how can we call that as poison?

At that time when drinking of water .which small drops are fallen down to earth that are capable for inducing poison in all over earth?

## **CONCLUSION -**

It is impossible to prove origin of poison from churning of ocean. This story breaks the rules of science. Promoters of this story state that the things which are proved



by science are untrue & story is true by giving it the form of divine .Origin of poison from Lord Brahma or from Samudra manthan is simply to divert our minds & thoughts. We need to view the scientific approach of this thing .According to that this story seems to be mythological. Ayurveda is a science and concept of any mythological story could be harmful for the progress. When we will move with the times change our mythological views then we will able to be equal or much more than modern medical science.

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