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Characteristics and Detection of Nanobacteria

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Description

Nanobacteria are the unit or member names of previously proposed classes of organisms, especially microorganisms with currently unreliable cell walls, which are generally accepted lower limits of life (in the case of bacteria such as mycoplasma, about). It is much smaller than 200 nm). Originally based on the nanoscale structure observed in the formation (including meteorites), the state of nanobacteria is controversial. Some researchers have suggested that they are a new class of organisms that can incorporate radioactively labeled uridines, while others attribute them to their simpler, abiotic properties.

One skeptic called it a "cold fusion of microbiology" and probably borrowed it from a notorious episode of false science. The term "Calcified Nano Particles" (CNP) is also used as a conservative term for possible lifestyle conditions. Studies tend to agree that these structures exist and appear to replicate in some way. However, the idea that these are living organisms has since been largely abandoned, and instead particles are considered to be abiotic crystallization of minerals and organic molecules property.

Characteristics

The main feature of nanobacteria is a more or less thick apatite coating. Apatite is composed of soluble calcium and phosphorus compounds present in media containing nanobacteria. Under the influence of restricted nutritional conditions, nanobacteria form fine colonies surrounded by the thick layers of apatite mentioned above. These colonies can grow larger than 1 mm.

Nanoparticles have unique nucleic acids. This suggests that it may have its unique replication and specific protein biosynthesis system. The size of nanobacteria varies between 20 and 500 nm. Smaller ones can pass through a membrane with a pore size of 100 nm. Nanobacteria are found in the blood of animals and humans. It is also

found in tissue culture, cell lines and bile. Nanobacteria are also found in Australian sandstone, stratosphere and meteorites. The distribution of nanobacteria is commonly studied using sample visualization using scanning electron microscopy and transmission electron microscopy. Another way to determine the presence of nanobacteria is to study their replication in cell-free medium. Several studies have shown the important role of nanobacteria in a variety of diseases, especially those associated with the pathological calcification process in the detection and treatment of nanobacteria.

Detection and treatment of nanobacteria

Nanobacteria are immunogenic. NanoBac Oy, Kuopio, Finland, has developed the kits for the detection of their antigen or antibodies. Nanobacteria are highly vulnerable to numerous chemotherapeutic agents. These include: 5fluorouracil, Trimethoprim, Nitrofurantoin, Cytosine arabinoside, 6aminocaproic acid, Trimethoprimsulfamethoxazole, Potassium cyanide and Sodium azide. These chemicals inhibit the biosynthesis of proteins and nucleic acids.

These agents can also suppress the function of the respiratory enzyme. The researchers then compared their creations with naturally occurring `nanobacterialike particles' from human blood samples. The particles not only looked identical to the limestone mix, they also showed no traces of DNA or RNA. The researchers then blasted the particles with enough radiation to slaughter any bacteria, and found that the particles still looked the same. Although calcium carbonate deposits in the body can cause some ailments, nanobacteria are probably benign because they are so widespread in the body.

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