LETTER FROM THE EDITOR

According to the Big Bang theory, billions of years ago, all matter and energy were compressed. When this matter rapidly rebounded about 15 billion years ago—forming galaxies—the larger stars fused together the smaller atoms, which created new atoms with higher atomic numbers. This process released an enormous amount of energy, ejecting a stream of elements that created the various solar systems. When our solar system began to coalesce, Earth and the other rocky planets were formed as molten globes of heavy elements. As a result, our planet consists of about 90 naturally occurring elements. All of them can be found in our oceans, while important differences in element composition distinguish the lifeless crust of the earth from the eventually created living life forms (eg, humans). Although oxygen is the most common element in both, silicon (Si) is the second most common in the crust and carbon (C) is the second most common in people. C is the "life element" included in over 10 million compounds. Si, which sits directly below C on the periodic table, has an extra layer of electrons that shields proton attraction. As a result, Si is less versatile than C and, instead of creating life as we know it, forms minerals.

On earth, there are a few animals with Si in their bodies, including sea urchins (in their spines) and radiolarian protozoa. However, even Federation scientists once believed that silicon-based creatures could never be intelligent life forms. But then they encountered the one notable exception, the Horta. The Horta, from Janus VI, are composed of a material similar to fibrous asbestos. These creatures exhibit features unlike others in the galaxy. They cannot be detected by tricorders, and they are invulnerable to type 1 phasers but can be injured with an adjusted type 2 phaser. They derive their nourishment from the rocks through which they drill their round tunnels as easily as humans move through air; to do so, however, the Horta require the aid of an acid so corrosive it will reduce humans to only fragments of bone and teeth. Although the Horta did not evolve in an oxygen-rich environment, they exist in one and have an unusually long life cycle compared with carbon-based life forms. Every 50,000 years, all but one of the Horta die out, leaving behind millions of eggs. The one that remains—the so-called mother Horta—watches the eggs until they hatch and then protects the hatchlings. The spherical Horta eggs consist mostly of Si and a few trace elements. They are stored in the Vault of Tomorrow in the Chamber of the Ages.

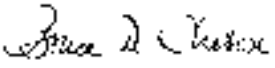
Miners, not knowing what the eggs were, once destroyed hundreds of them and faced retaliation by Mother H. It took Commander Spock of the USS Enterprise, using his mind-meld powers, to first discover that the Horta was actually an intelligent life form. He facilitated reconciliation, following which the Horta actually helped Federation miners locate minerals. In exchange, the miners left the Horta in peace to spawn their young.

When last I checked, there were currently no Horta in sight. Thus, we should treat ourselves as if we were human and not an alien life form, by putting into our bodies only what we are supposed to. On January 26, the US Food and Drug Administration (FDA) issued a warning further distinguishing human from Horta. It seems that there is an association between breast implants (BIs) and the development of the rare anaplastic large cell lymphoma (ALCL). Indeed, I saw one such patient a few years ago. BIs were first introduced in the 1960s and were grandfathered in by the FDA as a device in 1976. Since they became available, between 5–10 million have been implanted. They were originally labeled a class 2 device since Si was considered inert. The first case of ALCL with BIs was noted in 1985, and the first published report appeared in 1997. ALCL occurs with an incidence of 1 per 500,000 women, and ALCL with BIs has occurred in at least 60 women so far. The lymphoma tends to be of T-cell origin, CD30-positive and ALK-negative, developing in the seroma adjacent to the BI, 1–23 years postimplantation. The women, aged 23–87 years, tend to be symptomatic from the seroma and capsular contractions. More than two-thirds of reported cases have been with Si BIs rather than saline BIs. The FDA is requesting that any additional cases be reported to MedWatch.

I am currently treating two women with Hodgkin lymphoma initially limited to the chest, who have BIs, and I recently heard of a handful of cases of mycosis fungoides developing in the vicinity of a BI; thus, the FDA wants to know about ALL lymphomas that occur in women with BIs. As with lymphomas now known to be associated with HIV, Epstein-Barr virus, *Helicobacter pylori*, *Campylobacter jejuni*, *borrelia*, *Chlamydia psittaci*, and other infectious agents, we have another lymphoma for which we may have an etiology.

I don't know how many BIs were appropriately used for reconstructive surgery versus for cosmesis; however, BIs have now been reclassified as high-risk, class 3 devices. Therefore, just like botulinum toxin—which may cause pain and neurologic consequences when injected into the muscles and tissues—BIs should be considered potentially dangerous; they should be used with caution and only when absolutely necessary. And then, the safer the option, the better.

Until next month—Live long and prosper, ye carbon-based life forms.



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