

Early cancer detection, prevention critically important



Pier Paolo Pandolfi

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We all know how devastating is the outcome of a late cancer diagnosis when the tumor has already infiltrated multiple organs and metastasized to distant ones. While the tremendous progress in cancer treatment, like novel targeted therapies and immune therapies, allows us to also confront such serious conditions, medical and scientific evidence overwhelmingly demonstrate that treatment of early tumoral lesions proves much more effective and often curative.

Early cancer lesions can be removed and fully eradicated surgically. A straightforward example is represented by the surgical removal of a skin mole that is about to become a malignant melanoma. Or a small premalignant breast lesion detected by routine mammography that can be surgically removed while sparing the breast. Similarly, a polyp detected by a routine colonoscopy can be removed before it becomes cancerous.

This is the reason why the development of non-invasive tests that would be able to detect early cancer lesions in each organ of our body is so critical. And indeed, there is tremendous interest in developing blood-based tests that would point to which organ might be affected by an early cancer lesion, also with the help of artificial intelligence-based analytic approaches. Such a

non-invasive test could be administered every year, or even more frequently if the subject is known to be at risk of developing cancer, as we discuss below.

This precious information would next be followed by appropriate confirmatory tests (say a CT scan or an MRI). Such early lesions could be then surgically removed or treated with effective drugs in their early stage. This scenario is fortunately not science fiction, but very close to fruition. Early detection would not only increase the chance of rapid, curative solutions but would also spare the patients from the burden of the heavy toxicities and the costs associated with long-term cancer treatments. While this transformative phase in “early detection” is happening as we speak, we all well know that the battle with cancer can also be won at yet another level, which is “cancer prevention.”

Cancer prevention may seem a rather vague term, but the science behind it is much more compelling and robust than just a decade ago. Additionally, cancer prevention, as well as early detection, is by now a very actionable dimension. We can do a lot about it. We all know, for instance, that cancer predisposition, or our likelihood of developing cancer, is certainly dictated at least in part by our genes, by what we have inherited from our parents. And we can do a lot about it, by proactively studying and interrogating our genome to know if we indeed carry genes and gene variants that would predispose us to specific forms of cancer. This can be done at a reasonably lost cost and even for free in Nevada through the Healthy Nevada Project at Renown Health.

You may argue that this information would be frightening. While this could have been true ten years ago, nowadays this information can be acted upon, because it can be followed, as an example, by a much more frequent and accurate screening with the currently approved tests (e.g., colonoscopy; mammography, dermatological screening), but also with the novel, non-invasive, sensitive tests that will be soon developed and approved as we discussed above.

And yet there is another dimension, we can act upon to prevent cancer and to mitigate our cancer risk that we should all keep very clearly in mind. As we frequently read even in the lay press, our physical environment (e.g., pollution) and our diet do dictate our risk of developing cancer, as well as other ailments. While this notion was correlative and anecdotal until recently – think of the overall benefit of a Mediterranean diet – the science behind “food and cancer risk” is also becoming much more robust and detailed. We now know what specific natural or artificial dietary product we could remove or add to our diet to render it a cancer-preventive rather than a cancer-promoting diet. And this new knowledge is not only very important, but once again very actionable in order to reduce cancer risk, but also to mitigate cancer progression when the cancer is already established in our body. The future of early cancer detection and prevention is truly exciting and will have a tremendously favorable impact on cancer eradication.

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Don't let swimmer's ear smother your summer fun



Paul Manoukian

By Paul Manoukian

Summer is coming up fast! That means spending more time swimming at the beach or in the pool to cool off. However, too much time in the water isn't always a good thing for you or your child's ears. It can lead to an uncomfortable infection called swimmer's ear.

Swimmer's ear, or acute otitis externa, is an infection that occurs when water lingers in the ear and causes bacteria (or fungi) to grow excessively. The moist conditions of the ear canal can cause ear canal swelling, blockage, pain, muffled hearing, and ear drainage. Not surprisingly, 44% of swimmer's ear cases occur in the hotter months of June to August.

Swimmer's ear can be a nuisance, and if left untreated it can lead to recurring ear infections, hearing loss, and other serious complications. This year, splash into summer without swimmer's ear by following these easy tips to prevent this irritating infection.

Keep ears clean and dry

It's important to help your child dry each of their ear canals after swimming. Just tip the head to each side and pull back on the ear lobe until all of the water runs out of each ear. You can also carefully use a towel or hair dryer on the lowest setting to help to dry the ear canal.

Avoid placing objects in ears

Avoid using cotton swabs, paper clips, hairpins, or other foreign objects

to dig out earwax. This can cause ear wax to be pushed deeper into the ear canal, irritate the skin of the ear canal, or even rupture the eardrum, doing far more harm than good.

Wear earplugs while swimming

If you or your child experience recurring bouts of swimmer's ear, earplugs can be helpful. Make sure the earplugs fit appropriately and are specifically intended to keep water out of the ear instead of the simple foam earplugs used for noise reduction.

Most mild swimmer's ear cases can be treated at home, but if you or your child are experiencing prolonged, excessive pain, schedule an appointment with an ear, nose, and throat doctor right away. In most cases, your doctor will prescribe an antibiotic ear drop to fight the infection and pain relievers to ease any discomfort. Treatment usually only lasts about a week before the ear is fully healed, with the pain improving after just a few days.

If you suspect you or your child has an infection caused by swimmer's ear, the award-winning, compassionate team at Sierra Nevada Ear, Nose & Throat is here to help. Call (775) 882.3277 today to schedule your in-person or telemedicine appointment. Same-day appointments are available, and walk-ins are welcome.

Dr. Paul Manoukian has spent most of his life in northern Nevada. After attending the University of Nevada, Reno – where he majored in health science and minored in Romance Languages – Manoukian headed east to attend medical school at Tufts University School of Medicine. He simultaneously received a Master of Public Health (M.P.H.), concentration in Health

Policy and Management at Harvard University School of Public Health. He then completed his medical residency in Otolaryngology-Head and Neck Surgery at The Johns Hopkins Hospitals. He founded

Sierra Nevada Ear, Nose & Throat in 1995, providing a whole-patient approach to ENT care. More than treating a specific ENT condition or disease, he sees his role as caring for people and communities.

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