The Blaylock Wellness Report.
Living a Long, Healthy Life
by Russell L. Blaylock, M.D.
November 2018 Vol. 15, No. 11

Key Points

- How the medical establishment blocks revolutionary therapies
- Hyperbaric oxygen therapy reopens tiny blood vessels in diseased organs and tissues
- HBOT improves function of brains damaged by traumatic injury or stroke
- Concentrated oxygen kills cancer cells and makes chemotherapy better

PLUS

- Copper is a powerful antibacterial agent
- Better treatment for heart failure

ASK DR. BLAYLOCK

- How do you eliminate excess iron?
- Can CT scans damage your brain?

Hyperbaric Oxygen: Miracle Treatment Hidden From Patients

Oxygen is both necessary for life and a potential destroyer of life. We know that high oxygen levels can kill any living organism, including the most virulent bacteria and viruses.

Most medical experts are familiar with "oxygen toxicity," a condition in which cell damage is caused by high concentrations of inhaled oxygen. This occurs because oxygen chemically interacts with other elements to produce intense concentrations of destructive free radicals, which in turn trigger a process called lipid peroxidation.

Lipid peroxidation is common to many adverse conditions, including strokes, head injuries, cancer, autoimmune diseases, neurodegenerative diseases, heart attacks, liver damage, infections, and aging itself.

And yet, when properly administered, high concentrations of oxygen can produce miracles. We know that oxygen deficiency is a factor in a number of conditions, and that hyperbaric oxygen therapy (HBOT) can not only supply oxygen to the affected areas, but also alter metabolism in a way that results in long-term health benefits. This happens because HBOT inhibits a mechanism, inflammation, that is integral to so many health disorders.

In this month's issue of The Blaylock Wellness Report, I will discuss the use of highly concentrated oxygen under high atmospheric pressures — the procedure called hyperbaric oxygen therapy — to treat a number of diseases. I will also describe how it can potentially benefit many conditions that seem unrelated to those it has already been used to treat.

Brief History of the 'Oxygen Revolution'

As with most innovative treatments, the entrenched medical establishment persistently resists admitting the usefulness of HBOT. We have seen the same kind of elitist arrogance in the past with regard to probiotics, omega-3 fatty acids, natural anticancer compounds, and vitamin C to dramatically reduce septic deaths, as well as a host of other such innovative treatments — all of which are now accepted as beneficial treatments.

The idea of using high concentrations of oxygen under increased

modern use did not really begin until Frenchman V.T. Junod theorized that compressed air would increase the flow of blood to organs, including the brain. That theory has since been proven correct.

Dr. Paul Harch, an expert in the use of HBOT, cites a 1950s case in his book, "The Oxygen Revolution," in which researchers in the Netherlands were able to keep a pig that had all of its blood removed and replaced with a saline solution (saltwater) alive simply by putting the pig in a hyperbaric oxygen chamber.[1]

This demonstrated that oxygen under increased pressure could dissolve in saltwater in concentrations high enough to protect the pig's vital organs, without the need for red blood cells.

Dr. Harch also cites an interesting observation from the Spanish flu epidemic in 1918. At that time, Dr. Orval Cunningham noticed that infected patients living at higher altitudes (where the oxygen content was lower) had a significantly higher mortality rate than those living at sea level.

Dr. Cunningham also noticed that people living at high altitudes had a higher incidence of other disorders — which he suggested was caused by having less oxygen in their tissues.

Dr. Cunningham's discovery then attracted the attention of Henry Timken, a millionaire industrialist who in 1928 funded the building of a five story "steel

Unfortunately, few understood the process, and eventually the venture collapsed financially.

Predictably, the medical establishment had fought the idea every step of the way.

HBOT treatments finally gained acceptance, first by the military, for treating divers with decompression sickness — commonly called the "bends" — which results from too rapid ascent from deep water (where the pressure is high). When this occurs, air bubbles form in the bloodstream and can damage the brain and/or spinal cord.

In fact, HBOT continues to be used for this condition, and has saved the lives of tens of thousands of divers.

Since these early beginnings, considerable practice and study of HBOT have revealed its value for treating a great number of conditions, including:

- Strokes
- Head injuries
- Male impotence
- Cerebral palsy and other neurodevelopmental disorders
- Autism spectrum disorders
- Neurodegenerative diseases
- Central retinal artery occlusion
- Brain abscesses
- Osteomyelitis

The Blaylock Wellness Report® (#173) is a monthly publication of Newsmax Media, Inc., and Newsmax.com. It is published at a charge of $56.95 for print delivery ($49.95 for digital/online version) per year through Newsmax.com and NewsmaxHealth.com.

Author & Editor Russell L. Blaylock, M.D.

Contributing Editor Matthew Kalash

Art/Production Director Phil Aron

For Subscription/Customer Service inquiries, call 1-800-485-4350 or email wellnessreport@newsmax.com.

Send email address changes to wellnessreport@newsmax.com

- Radiation damage
- Serious burns
- Sudden hearing loss
- Lyme disease
- Heart failure
- Post-joint surgery healing
- Migraine headaches
- Tinnitus
- Carbon monoxide poisoning
- Clostridial gas gangrene
- Crush injuries
- Serious infections (necrotizing fasciitis)
- Wound healing
- Diabetic ulcer treatment
- Cancer

How the Medical Establishment Blocks Revolutionary Therapies

Despite all of these demonstrated uses, the medical establishment continues to condemn the use of HBOT. But of course, that is to be expected. If the elite of medicine did not discover or develop a treatment, they will fight tooth and nail against its use — at least until so much evidence finally accumulates they are forced to admit it works.

For instance, as early as the 1980s, orthodox medicine was fighting against the use of the omega-3 fatty acids that were then being promoted by alternative medicine practitioners to reduce heart attacks and strokes.

But the medical establishment insisted their own studies showed no benefit.

One such study used olive oil as a placebo for comparison to the omega-3 oil. That was ludicrous for two reasons. First, olive oil is not a placebo. A placebo has to be inert, having no active effect. Olive oil is not inert. In fact, it has many biological benefits. Even at that time, it was understood that olive oil reduced the risk of heart attacks — the very thing the study was focused on.

Obviously, if your placebo has the same effect as the substance you're studying, you shouldn't expect to find different outcomes.

Such a study should never have been accepted for publication. Yet it was used to keep physicians from recommending omega-3 oils to their heart patients for decades.

How HBOT Works

HBOT forces oxygen into areas of impaired microcirculation because it does not require red blood cells to carry the oxygen. Rather, at high barometric pressure the oxygen is dissolved in the blood serum and the extracellular fluid outside of cells. This raises the oxygen level significantly in hypoxic areas.

During time in the HBOT chamber, oxygen opens narrowed blood vessels by lowering inflammation — which is the cause of the impaired microcirculation. Once a person is out of the chamber, these new blood vessels remain open and able to deliver oxygen-rich blood where it is needed.

By reducing inflammation, the catalyst for many diseases is removed. For example, we know that activation of immune cells called microglia and macrophages is at the root of most neurological disorders, including strokes, head injuries, brain infections, autism spectrum disorders, autoimmune disorders (like multiple sclerosis), and neurodegenerative diseases such as Alzheimer's, Parkinson's, and Huntington's diseases.

Then, some 40 years later, a new report came out in the medical literature confirming that omega-3 oils reduces the incidence of heart attacks. Why did this revelation suddenly appear?

This illustrates the second reason for rejection of alternative treatments by the medical establishment. The reason for the about-face on omega-3 was that the medical establishment was proposing a form of omage-3 oil made by a major pharmaceutical company, which meant that it was classified as a prescription medication that would cost many times more than an over-the-counter form of omega-3 of even the highest purity.

In the field of HBOT, a similar thing is now happening. Major medical corporations, in league with the government, have been buying up independent HBOT centers and controlling access to this lifesaving procedure.

In fact, these corporate HBOT centers are all attached to hospitals and use Medicare/Medicaid criteria for access to this incredible treatment. As a result, they deny requests for most of the indications listed above. In fact, only a handful of indications are accepted.

Fortunately, a few HBOT centers have remained independent, and a person can still pay out-of-pocket for the treatments. The cost varies from $100 to $200 dollars per treatment.

You can also purchase smaller HBOT units that can be used at home.

HBOT: Remedy for Poor Circulation

To understand the value of HBOT, you need to understand a little about medical biology. Most people know that oxygen is carried to tissues and organs by major blood vessels. But the actual introduction of oxygen into the tissues — along with removal of carbon dioxide — takes place in what are referred to as microvessels: arterioles and, primarily, capillaries.

With many diseases, certain tissues and organs have poor microvascular blood flow. Hence those tissues are deficient of oxygen and nutrients.

For example, in cases of kidney disease, various parts of the kidneys suffer impaired microcirculation. We see the same thing in heart disease, liver disorders, neurological disorders, and a host of other medical conditions — especially diabetes.

When the delivery of oxygen is impaired, a condition called hypoxia (low oxygen) develops. When that happens, tissues begin to release various chemicals (inflammatory cytokines and chemokines) that trigger inflammation. This process further impairs microcirculation and, as a result of a vicious circle, the condition grows progressively worse.

We see this in diabetic kidney disease, for instance. Eventually, the kidneys fail completely and the person requires a transplant.

This same process occurs with neurological diseases, and is actually much worse in inflammatory neurological diseases such as multiple sclerosis.

In these cases, some parts of the brain have worse microcirculation than others; this accounts for the different diseases that occur.

In addition, hypoxia-induced inflammation activates special immune cells in the brain called microglia. When that happens, there is a buildup of two brain-destructive compounds — inflammatory cytokines and excitotoxins. The interaction of these two compounds leads to an extremely destructive process called immunoexcitotoxicity.

Aging itself can also lead to progressive impairment of microcirculation in various organs and tissues, causing a multitude of medical problems such as kidney failure, liver impairment, impaired lung function, poor memory, heart failure, and eventually rapid decline in the functioning of all major organs.

Keep in mind the strong link between inflammation and poor microcirculation. As we age, our bodies become progressively more inflamed. This means they are becoming progressively more hypoxic (oxygen deficient).

Hypoxia causes a buildup of free radicals and lipid peroxidation products that further damage cells, tissues, and organs. It also further impairs microcirculation. This cascade of events can result in a rapid decline in health.

This is where HBOT can be beneficial. By introducing high concentrations (80 percent to 100 percent) of oxygen at increased barometric pressure, oxygen can be forced into parts of the body suffering from impaired microcirculation. This corrects hypoxia and eliminates the harmful chemicals (cytokines, chemokines, and excitotoxins) triggered by hypoxia.

Better yet, it has been shown that HBOT treatments increase microcirculation not just during treatments, but permanently.

Limits Damage, Aids Healing of Brain Injuries and Strokes

Prior to 2011, every study on the use of HBOT for traumatic brain injuries was either designed to fail or just so poorly designed as to be completely useless for research purposes.

One "trick" used by those opposed to HBOT involved conducting studies that included only severely brain-injured people. The designers of these studies knew that no treatment could produce dramatic,

statistically significant results in patients with such severe disruption of the brain's physical structures.

That's not to say that a few people could not improve neurologically — even dramatically. But with such severe brain trauma, the rates of success were doubtful to be statistically significant.

Still, these studies did show that there was an almost 60 percent reduction in mortality for the patients treated with HBOT.[2]

Apparently the medical orthodoxy doesn't think that's important. But I'm sure the families of these injured individuals would disagree.

Another deception in HBOT studies was to use patients who were breathing room air under increased barometric pressure (1.3 ATM) as control subjects in placebo conditions. As noted, a placebo must be inert (neutral) so that it has no physiological effect on the patients being studied. Room air at 1.3 ATM increases tissue oxygenation by 28 percent to 43 percent.[3]

In essence, the control group in this study was also a treatment group. That made HBOT look less effective.

Dr. Harch points out that when administering HBOT, there are two components to consider: pressures used, and the percentage of oxygen concentration.

In 2011, two careful studies were conducted: one included a number of stroke patients, and the other included patients with traumatic brain injuries. Both studies found significant neurological improvement for patients who underwent HBOT treatments.

In the brain trauma study, researchers used patients with mild brain injuries, many of whom were suffering from chronic post-concussion syndrome, which can be quite disabling.[4] The study was designed with a triple comparison to verify its accuracy.

The patients treated with HBOT received 40 sessions using 100 percent oxygen lasting one hour each. Cognitive function and quality of life were assessed by a detailed computerized evaluation and compared.

The researchers also performed SPECT (single photon emission computed tomography) scans on the participants to measure metabolic brain function.

They found that the HBOT treatments significantly improved cognitive function and quality of life. There were no improvements in the group not receiving HBOT.

The SPECT scans demonstrated significant improvements in neuronal activity (brain function) after completion of the HBOT treatments. This offered an objective measurement of the patients' improved brain function.

In the second study, which used stroke patients, the researchers also found significant improvement in brain function both in terms of quality of life and neurological testing.[5]

Incredibly, these results occurred even in cases where the patient's stroke had occurred years before the treatment started.

Part of the reason HBOT can reverse stroke damage even years after the event is because it lowers the inflammatory cytokine TNF-alpha. Other studies that used drugs to lower TNF-alpha had similar results with regard to stroke damage.[6,7]

Once again, SPECT scanning was conducted on the stroke patients after their HBOT sessions to confirm the results with an objective measure.

In both of these studies, improved brain function was sustained after the treatments ended. The reason for these successes with HBOT has been debated, but we know HBOT improves a number of factors within damaged brains, including:

- Improvement of mitochondrial energy production[8]
- Reduction in death of brain cells (apoptosis)[9]
- Increased release of brain growth and repair factors (BcL-2, BCL-XL)[10]
- Improvement of blood flow in the brain[11]
- Reduction of inflammation[12]
- Reduction of brain swelling (edema)
- Protection of the blood-brain barrier[13]
- Restoration of axons and dendrites (neuron connections)
- Reduction of oxidative stress
- Stimulation of neuronal stem cells
- Reduction in both microglial and astrocytic activation[14,15]

Considerable evidence points to immunoexcitotoxicity as a central cause of damage in cases of both strokes and brain injury.[16] Immunoexcitotoxicity occurs as a result of prolonged activation of brain microglia, which release inflammatory cytokines and excitotoxins simultaneously.

Studies have shown that these microglia are rapidly activated following brain injuries and strokes, and they reach maximum levels three days after injury.[17]

A fairly recent animal study of head injuries

found that HBOT reduced activation of microglia following the injury. It also significantly reduced levels of TNF-alpha in the brain. TNF-alpha is a powerful inflammatory cytokine that activates a type of glutamate receptor (calcium permeable AMPA receptor) that is especially destructive when overstimulated.

We see elevations of TNF-alpha in a number of neurological disorders, such as Alzheimer's disease, Parkinson's disease, strokes, Lupus, multiple sclerosis, brain infections (meningitis and viral encephalitis), Down syndrome, and autism.[18]

The findings of the last study would mean that HBOT could be useful for treating all of those conditions. Yet the government and corporate medical institutions do not approve the use of HBOT for any of these disorders. Millions of people are paying the price for this idiocy. Fortunately, people can seek these treatments outside the control of corporate medicine by going to free-standing HBOT centers.

Until recently, it was believed that HBOT was beneficial only if commenced within six hours of an injury. But this study found that the period for potential benefits could be extended to eight hours following a brain injury.

Using animal models, the researchers also measured the volume of brain affected by the head trauma, the degree of loss of brain cells by apoptosis, ans motor function. They found that treatment with HBOT at one hour and at eight hours had equally effective outcomes on all aspects of the injury — volume of brain lost, motor function, and microglial and TNF-alpha activation.

How Oxygen Kills Cancers

Increasingly, we're learning that cancerous tumors are controlled by their surrounding environment — called a microenvironment — as well as by their genetics.[19,20] I have written before about how cancer stem cells generate millions of daughter cells that make up the bulk of the tumor, and that the tumor's microenvironment carefully regulates how the tumor behaves, determining its ability to grow, invade its surroundings, and eventually metastasize (spread) to other parts of the body.[21]

The most important factor within the tumor microenvironment is inflammation,[22,23] which activates signals in tumor cells, making them more aggressive and invasive. The role of hypoxia is closely linked to the process because oxygen deficiency is known to trigger inflammation signals.[24]

Inside tumors — especially aggressive, fast-growing tumors — we see several areas of hypoxic tissue. Sleeping cancer stem cells can hide within these areas, later to wake up, which results in a rapid recurrence of the cancer.[25]

Chemotherapy drugs cannot enter these hypoxic parts of the tumor because of the poor blood circulation. Radiation treatments also have little effect on hypoxia tumor cells. In fact, because both treatments generate high levels of inflammation, they can make surviving cancer cells much more aggressive and more likely to spread and kill.

But oncologists rarely tell their patients these "uncomfortable" facts.

High oxygen levels can kill cancer cells. And of course, HBOT treatments can generate very high oxygen levels within tumor tissues. Most importantly, HBOT not only forces oxygen into hypoxic parts of tumors, it also increases the number of blood vessels entering the tumors, making them more accessible to chemotherapy.

High oxygen levels also make tumor cells much more sensitive to radiation.

When tumor cells invade blood vessels and lymphatics (the vessels that transport lymph, which

HBOT Could Prevent Military Suicides

One area where HBOT would have tremendous benefits is the treatment of military veterans who have suffered blast injuries or post-traumatic stress disorder (PTSD). Today, some estimates are that PTSD is leading to the suicides of 20 U.S. military veterans every day, meaning more are killed by suicides than have died in combat in recent years.

Studies by the National Brain Injury Rescue and Rehabilitation Project have shown that the great majority of these deaths could have been prevented by HBOT treatments, even when started later in the course of the disorder. This is not just a travesty, but a crime against our soldiers.

For those who think that government medicine is compassionate and really cares about you, just review how the government chose to look after the men and women who gave their all for this country. We have more than 700,000 veterans with brain injuries and being abused through neglect by the government they gave their all to protect.

Interestingly, all the HBOT studies funded by the U.S. military purport to find no benefit from HBOT treatments, yet virtually all of the objective independent studies found significant benefit.

This is just what we have seen with studies concerning fluoride, vaccines, and statin drugs — just follow the money.

contains white blood cells) they can then travel over long distances in the body and become implanted in other areas — a process called metastasis.

Studies have shown that very few cancer cells actually survive the trip — most are killed by the immune system.[26,27] In addition, high oxygen levels in the bloodstream and the tissues make survival of these metastatic cancer cells much less likely.

But once the metastatic tumor cells are implanted in their new locations, they can become dormant, only to wake up years or even decades later.[28]

While there is some evidence that HBOT alone can suppress cancer cell growth, it cannot, in most cases, cure cancer.[29,30] It can, however, greatly enhance the ability of both conventional treatments and alternative treatments to kill cancer cells.

Low pressure HBOT is much safer than pressures greater than 2 ATM. One of the possible side effects of HBOT is oxygen toxicity, because high oxygen levels can be toxic even to normal cells if precautions are not taken. Oxygen toxicity can be prevented by using natural antioxidants that counteract the condition. These include carotenoids, vitamin E, tocotrienol, magnesium, flavonoids, and other plant products.

When treating cancer patients, I administered high levels of curcumin, Boswellia (the nano curcumin and nano boswellia forms), quercetin (as isoquercetin), resveratrol, R-lipoid acid, apigenin, luteolin, ellagic acid, EGCG (Teavigo), and naringin — all of which have powerful anticancer and immunoexcitotoxicity blocking effects, especially when they are used in combination.[31,32]

I have seen dramatic elimination of extensive cancers using HBOT along with these natural anticancer compounds.

In addition, all of the anticancer compounds protect normal cells from oxygen toxicity and promote the healing of damaged tissues, primarily by reducing inflammation and promoting growth factors.

Reducing Damage and Increasing Effectiveness of Cancer Treatments

All conventional cancer treatments — including chemotherapy and radiation — induce intense inflammation in the entire body, not just around the cancer. Ironically, this makes the treatments powerful inducers of cancer.

The basic principle of conventional cancer treatment is to use doses that are close to fatal, in the hope of killing the cancer before its host. Sometimes the treatments kill the patient first.

This is something else oncologists don't like to talk about.

Radiation treatments are especially harmful, and can cause serious problems — such as severe injury to the intestines, abnormal bone marrow function (and immune suppression), radiation proctitis, radiation glossitis, and even damage to blood vessels and the heart. These ailments can affect cancer survivors even many years later.

Within the nervous system, radiation can result

in delayed, progressive damage to the area radiated. We call this radiation necrosis or radionecrosis, and it can occur even years after radiation treatments are completed.[33] This type of damage can appear on scans as a tumor mass.

HBOT has been shown to significantly repair radiation damage to tissues and organs, and is especially effective for treating radionecrosis.[34-36] This is very useful in children with nervous system cancer, because the radiation damage can result in severe neurological damage and impairment of brain function.[37]

I have witnessed dramatic improvements in a child who underwent radiation treatment for highly malignant brain and spinal cancer. It can only be described as a miracle.

HBOT can also reduce the damage caused by chemotherapy agents and increase their effectiveness against cancer. When combined with the anticancer plant extracts, dramatic anticancer effects occur. I have witnessed this as well.

Unfortunately, the government and corporate medical controllers will not justify such treatments with financial coverage. As a result, patients must suffer and die unnecessarily.

This is especially distressing when considering all the children who are suffering needlessly during their conventional cancer treatments.

Other Benefits of HBOT

Dr. Paul Harch probably has the greatest degree of experience using HBOT for treatment of conditions not approved by the government and corporate medical controllers.

But others also have experience, and in most instances have seen impressive results.

Some of the greatest success with HBOT has come with diabetes, non-healing ulcerations, headaches (especially migraine and cluster headaches), spinal cord injuries, fibromyalgia, complex regional pain syndrome, cerebral palsy, orthopedic conditions (joint problems, necrotic bone disorders, osteomyelitis), hearing disorders, central retinal artery thrombosis, and Lyme disease.[38-40]

In 1983, Dr. B.H. Fischer conducted a careful study of severely disabled multiple sclerosis patients, comparing HBOT to conventional treatments.[41] The study was funded by the National Multiple Sclerosis Society (in turn funded directly by pharmaceutical interests), who, in my opinion, didn't want to have a successful outcome from the study. They forced Dr. Fischer to remove critical data to weaken the results. But still he found significant improvements in the patients treated with HBOT, and the improvement lasted at least a year in a number of patients.

Despite dramatic improvements in 70 percent of the patients, even in advanced MS cases, his treatment was never accepted by orthodox medicine.

Interestingly, the patients only received 20 treatments — even though Dr. Harch had determined that in most cases at least 40 treatments were necessary. Essentially, there could have been even greater improvements with the proper number of treatments.

Later, Dr. Fischer was fired from his university position and his HBOT chamber was destroyed.

In an excellent synopsis of the problems with modern medicine, Dr. Kenneth Stoller has written, "Technocrats rotating between corporation and state are the last people you want making medical decisions, but that is exactly who has been making medical decisions." ■

REFERENCES

1. Harch PG. The Oxygen Revolution. Third Edition, 2016, pp20-21.
2. Rockwald GL et al. J Neurosurg 1992;76:929-34.
3. Harch PG. J Neurotrauma 2013;30:1995-1999.
4. Biussi-Gross R et al. PLoS One 2013;8(11):e79995.
5. Efrati S et al. PLoS One 2013;8(1):e53716.
6. Tobinick E et al. Exp Rev Neurother 2010;10: 985-1002.
7. Tobinick E et al. Clin Drug Investig 2014;34:361-6.
8. Palzur E et al. Brain Research 2008;1221:126-133.
9. Wee H-Y et al. J Surg Res2015;197:382-9.
10. Vlodavsky E et al. Acta Neuropathol 2005;110:120-6.
11. Chen Z et al. JMRI 2010;31(5):1054-60.
12. Vlodavsky E et al. Appl Neurobiol 2006;32:40-50.
13. Zhang JH et al. Pathophysiology 2005;12(1):13-77.
14. Lim S-W et al. J Surg Res 2013;184:1076-84.
15. Lin KC et al. J Trauma 2012;72:650.
16. Blaylock RL, Maroon J. Surg Neurol Inter 2011;2:107.
17. Gentleman SM et a. Forensic Sci Int 2004;14:97.
18. Blaylock RL. Surg Neurol Inter 2013;4:118.
19. Blaylock RL. Surg Neurol Inter 2015;6:92.
20. Blaylock RL. 2013;4:15.
21. Chaffer CL et al. Proc Natl Acad Sci 2011;108(19):7950-55.
22. Linus LO et al. In J Clin Exp Med 2017;10(12):15834-65.
23. Jeong YJ et al Oncology Lett 2018;15:2380-6.
24. Peitzsch C et al. J Radiat Biol 2014;90(8):636-52.
25. Bororski T et al. Cancer Res 2011;71(7):634-39.
26. Kang Y et al. Cancer Cell 2013;23(5):573-81.
27. Meng S et al. Clin Cancer Res 2004;10(24):8152-62.
28. Goss PE, Chambers AF. Nat Rev Cancer 2010;19(12):871-77.
29. Stepein K et al. Med Oncol 2016;33:101.
30. Granowitz EV et al. Anticancer Res 2005;25:3833-42.
31. Blaylock RL, Maroon J. Surg Neurol Inter 2012:3:19.
32. Blaylock RL. 1999;2(2):19-29.
33. Huq F et al. Indian J Surg 2015;77(Suppl 1): 81-3.
34. Bui QC et al. Int J Radiat Oncol Biol Phys 2004;60(3):871-8.
35. Safra T et al. Clin Oncol 2008;20(4):284-7.
36. Bern J et al. Dis Colon Rectum 2000;43(19):1435-8.
37. Strenger V et al. Steahlentherapie Und Onkologie 2013;189:759-64.
38. Shapira R et al. Neural Regen Res 2018;13(5):817-8.
39. Reis ND et al. J Bone Joint Surg 2003;85:371-5.
40. Al-Waili NS et al. Adv Ther 2005;22(6):659-78.
41. Fischer BH et al. New Eng J Med 1983;308:181-6.