BEWARE OF QUACKWATCH

SUMMARY

Quackwatch.com purports to be a guide to “Quackery, Health Fraud, and Intelligent Decisions”. In order for this to be true its reporting must be objective and fair. However, many people including scientists and physicians who have examined its content have found ample mistakes, factual inaccuracies, innuendo, and more. One prime example is “A Skeptical Look at David A. Steenblock, D.O.”

This article, based on information gleamed from physician and adult stem cell expert Dr. Steenblock’s websites during 2009 and elsewhere, questions his ability to integrate journal research findings into an evidence-based practice (EBP), states that many of his treatments lack a scientifically plausible rationale and have not been shown to be effective, and alleges that his claims for what adult stem cells can do therapeutically deviates greatly from what is likely.

“A Skeptical Look...” also serves up a cursory critique of an open pilot study that Dr. Steenblock was part of in Mexico in 2005. This study involved eight children with cerebral palsy treated with pure allogenic (donor) umbilical cord stem cells. It also takes aim at an interview posted to one of Dr. Steenblock’s websites featuring a teenage named Emily with cerebral palsy treated with her own stem cell-rich bone marrow who experienced a remarkable response.

Dr. Barrett’s article concludes by citing California state medical board decisions against Dr. Steenblock.

As readers will discover in this answer to “A Skeptical Look...”:

- Dr. Barrett’s dismissal of electrodermal (Biomeridian) testing not only ignores contrary findings in various controlled studies but raises concerns about what his conclusions imply with regard to the thousands of patients who have benefited from electrodermal testing.
- Dr. Barrett’s critique of hyperbaric oxygen therapy as “simulating cells to regenerate” after an acute stroke is shown to be a straw man. The focus of Dr. Steenblock’s work with HBOT for stroke has focused on reducing swelling and inflammation in sufferer’s brains. But even so, readers will learn that the scientific literature has hundreds of papers on how HBOT works to foster regeneration.
- Dr. Steenblock’s work with adult stem cells as an advisor to a clinical program in Mexico and elsewhere, as well as his use of stem cell-rich bone marrow aspirate in patients is laid out. And although Dr. Barrett’s article did not delve into specific concerning which claims go beyond what “is likely”, readers will learn that many stem cell experts who called the umbilical cord
stem cell treatments being done at one Mexican clinic (Dr. Steenblock served) a scam, turned around and secretly referred patients to it. Also, readers will learn how the sort of off-label clinical experimentation done by Dr. Steenblock is actually an integral part of medical discovery and progress.

- The case of Emily, a teenager with cerebral palsy, case will be discussed and readers given a chance to view an interview done following a 2nd bone marrow aspirate treatment (Those who wish to view it now can do so by going to http://bit.ly/KeaNO3).

- Readers will see quotes from the open pilot study Dr. Steenblock was a part of in which the authors admit its limitations but also point out one of its primary objectives: To show the safety of using pure donor umbilical cord stem cells in children with cerebral palsy (Something it did show).

- And lastly, readers will learn about an article that reveals the inherent flaws and unfairness of the state of California’s decisions against Dr. Steenblock aptly titled “Goliath v. David”.

By the time readers finish reading “Beware of Quackwatch” they will likely find themselves wondering if Quackwatch’s articles including “A Skeptical Look at David A. Steenblock, D.O.” are really protecting medical consumers or misinforming and even misleading them.
MAIN ARTICLE

Quackwatch.com advertises itself as “Your Guide to Quackery, Health Fraud, and Intelligent Decisions”
Operated by Stephen Barrett M.D.

Its mission statement includes these statements:

“Quackwatch is an international network of people who are concerned about health-related frauds, myths, fads, fallacies, and misconduct. Its primary focus is on quackery-related information that is difficult or impossible to get elsewhere.”

Although “quackery-related information” is primary one would expect to see a lot of posted material on “health-related frauds” and “misconduct”. After all, the media is filled with reports of fraud and misconduct among mainstream doctors and researchers. And yet QW does not appear to devote much of its website to covering these dire happenings.

Perhaps Dr. Barrett and his advisers feel that failings and crimes that occur in mainstream medicine and science are amply covered elsewhere. This is his prerogative, of course, but it might round out things considerably if he at least provided links to articles, analyses and reports that would help medical consumers understand the extent and magnitude of this. And while fraud and misconduct committed by individuals and firms involved in complementary alternative medicine (CAM) and natural health care is grievous and costly, it helps to put it in perspective by juxtaposing it with the cost of medical malpractice, fraud, poor medical judgment, the human toll of overprescribed drugs, hospital infections including fatal ones caused by poor hygienic practices of doctors, nurses and others handling patients, and the like. In fact, consumers who take the time to compile and compare cases and statistics on the fraud and misconduct that has been exposed in the two camps (during the past few years alone) will quickly come to realize that the medical industry greatly outdistances the natural healthcare field in terms of the financial cost to consumers and taxpayers caused by Medicare fraud, lost productivity and man hours, and lives crippled and cut short.

This is but a small sampling of the wealth of information available on the Internet that illustrates the dark side of conventional medicine and research:

“Drug deaths now outnumber traffic fatalities in U.S., data show” [http://lat.ms/qpJTIQ](http://lat.ms/qpJTIQ)


“Study: Half of Infection Deaths Linked Directly to Hospital Care” [http://on.wsj.com/cTt19D](http://on.wsj.com/cTt19D)


Retraction Watch – Covers fraud by scientists [http://retractionwatch.wordpress.com/]


More on Quackwatch shortly.

The Internet has put unprecedented information at our fingertips. Much of this information is factually accurate while a great deal is biased and some skewed because it has been filtered or cherry-picked. If, say, you are looking for a great Thai restaurant and find out the food or service (or both) doesn’t live up to the reviews, the cost to you is relatively low (Misspent dollars and perhaps a bad case of indigestion).

But suppose you are suffering from a fairly serious medical condition or disease and decide not to retain the services of the very doctor who could have made a great difference in your situation because of reviews that are misleading? Not misleading in the “intentionally lied or libeled someone sense of the word” but in terms of “stacking facts and opinions” to favor one’s negative spin while either ignoring contrary or mitigating facts or information or just not bothering to gather and include this in your article or review? While this sort of thing may not be illegal or subject to legal remedy it is patently unfair to you the consumer of medical information. The real question you should be asking is why any individual or group of individuals would engage in such seemingly deliberate misstating and skewed presentation of facts regarding well-meaning people who have dedicated their lives to helping others.

Many wholistic or CAM (Complementary Alternative Medicine) doctors have found themselves portrayed as incompetent or nefarious in some way thanks to articles that tell part of their story and conveniently leave out (as famed journalist Paul Harvey was fond of saying) “the rest of the story”. As we all know journalists are supposed to be objective and fair. Unfortunately some call filtering out contrary or mitigating facts or information or just not bothering with them “objective journalism”. Critics call it “yellow journalism”. Not surprisingly it is both alienating and justifiably angering people.

Sadly, many who portray themselves as “consumer advocates” engage in this sort of skewed reporting. They call it protecting the consumer. In some instances what they publish is misleading and damaging in the sense it steers people away from the very person or institution that could genuinely help them.

Case-in-point: Physician David Steenblock of Mission Viejo, California.

For over 40 years Dr. Steenblock has specialized in using the best of all available therapies to help people struggling with chronic diseases and medical conditions; people who’d had been told “There is nothing more modern medicine can do for you” by their conventional doctors. Some had been hobbled or had their problems exacerbated by the drugs their traditional doctor put them on. Many arrived at Dr. Steenblock’s office saddled with intractable and even terminal medical diseases and conditions that were not responsive to conventional medical treatments, or were for a time and then ceased being so. Since his patient population often could not tolerate drugs due to their side effects or had already been harmed by them, he had to search out and zero in on gentler remedies that would work for them. Among the many things he has tried in various forms and combinations down through the years are
hyperbaric oxygen, heavy metals IV chelation therapy, low fat diets to halt and even reverse coronary artery disease (since 1966 actually), and most recently the harvesting of patient’s own stem cell rich bone marrow and then its infusion back into their bodies by intravenous administration or concentrated and then directly into the tissues such as damaged perispinal tissues in amyotrophic lateral sclerosis (ALS).

While not a researcher in the formal sense of the word, he has devoted a great deal of time, energy and resources to in-office experimentation in which he took drugs or devices approved by the FDA to treat one specific condition or a given set of conditions and employed them to tackle others. For instance, in the early 1990s he tried hyperbaric oxygen therapy as part of a comprehensive treatment program in acute stroke cases. This combination was, he reasoned, a logical one that should induce healing and restoration of lost functions in damaged areas of stroke sufferer’s brains. It was with no undue trepidation that Dr. Steenblock tried this on a lady who had had a massive stroke and was transferred by her family (at their insistence) to his clinic directly from a nearby hospital’s Emergency Room! She was semiconscious, paralyzed and uncommunicative. In the span of a few weeks time this lady made such an impressive turnaround that it left her family and Dr. Steenblock’s staff flabbergasted. You can learn more about this and other lines of successful in-office experimentation by clicking this link: http://bit.ly/JASPH3

This is how Dr. Steenblock’s literature and in-office research-oriented clinical work is depicted on his www.stemcellmd.org website:

“He has devoted many years to research in the fields of biochemistry, pathology, nerve and muscle physiology, cardiovascular disease and other chronic diseases associated with aging. In addition, Dr. Steenblock has also written countless scientific articles and is a contributing editor to several national consumer health magazines. When Dr. Steenblock is not with a patient, he is at his computer pouring over the latest research or reading through the scores of medical journals that come into his office on a daily basis. Not surprisingly, Dr. Steenblock has a very extensive library and two research assistants. What he doesn't know, he quickly and avidly investigates and masters – and what he does know, he gladly gives to the world.

Click here to read his Curriculum Vitae.”

This brings us back to Quackwatch.

In an article titled “A Skeptical Look at David A. Steenblock, D.O.” medical consumer advocate and “quackbuster” Stephen Barrett, MD, took a near identical entry to that above from 2009 (The date Dr. Barrett visited Dr. Steenblock’s websites to gleam information for his article) along with other information including a biographical statement about Dr. Steenblock posted by the Cancer Control Society and wrote this:
David Steenblock, D.O. operates a clinic in Mission Viejo, California, which claims to "give the maximum amount of recovery possible for stroke and traumatic brain injury." The facility, now called Dr. Steenblock’s Clinic, operated as the Brain Therapeutics (sic) Medical Clinic from 2001 through 2007 and the Health Restoration Medical Center before that. According to its Web site, the clinic provides:

A Comprehensive Neuro-Rehab Program utilizing Hyperbaric Oxygen, Pulsed Magnetic Therapy, Acupuncture, External Counterpulsation, as well as Nutritional /Metabolic Therapies. Where brain damage is located determines which nerves, muscles, organs and tissues will be affected. But we are also a "brain and body" therapeutics medical clinic, treating the whole person, striving to find the underlying cause of your disease, then addressing it with safe, non-invasive, effective therapies backed by scientific and clinical proof [1].

The site also states:

He has devoted many years to research in the fields of biochemistry, pathology, nerve and muscle physiology, cardiovascular disease and other diseases of aging. He has also written numerous scientific articles and is a contributing editor to several national consumer health magazines [2].

Steenblock's StemCell.md Web site states:

When Dr. Steenblock isn't with a patient, he is at his computer investigating new research or reading through stacks of medical journals that come in on a daily basis. Dr. Steenblock has an extensive library and two research assistants. What he doesn't know, he quickly and avidly investigates—and what he does know, he gives to the world.

No other physician in the U.S. has been on the forefront of alternative medicine for these past thirty years and continues to stay on the forefront, against all odds, in advocating safe, effective and natural treatments for brain injuries and chronic degenerative disease [3].

What treatment does he offer? According to a biographical sketch on the Cancer Control Society's Web site:

Dr. Steenblock uses bone marrow stem cell therapy, hard chamber hyperbaric oxygen, intravenous glutathione, chelation of all types, pulsed electromagnetic therapies, external counterpulsation, intermittent high altitude therapies, spinal disc decompression, nutritional therapies, etc. for the prevention and treatment of stroke, brain injuries, Huntington’s disease, Parkinson’s disease, multiple sclerosis, ALS, macular degeneration, cerebral palsy, autism, Alzheimer’s disease, heart disease, kidney and liver disorders, diabetes, anti-aging, etc. [4]
PHOTOS TAKEN AT DR. STEENBLOCK’S LIBRARY AT HIS NAMESAKE NONPROFIT RESEARCH INSTITUTE (SRI)

Dr. Barrett then added this comment concerning what he cobbled together:

“Some people who read the above statements might conclude that Steenblock is a great scholar who offers the latest, most effective, and most innovative treatments for many serious diseases. That's certainly not how I perceive him. What counts is not the amount of time spent reading
journals, but the ability to integrate the information into an evidence-based practice. Steenblock, however, includes treatments that have no scientifically plausible rationale and have not been demonstrated to be effective. What’s more, some of the conditions he claims to treat do not have any proven effective treatment. Despite all of his research and alleged treatment success, the only scientific journal articles I could find under his name in the Medline database were three papers about blood clotting in dogs and guinea pigs published in 1968 when he was working as a research assistant in a biochemistry lab.”

Has Dr. Steenblock failed to integrate his journal and database findings into an “evidence based practice”? Consider this about evidence-based practice from Wikipedia’s entry on the subject:

Evidence-based practice (EBP) involves complex and conscientious decision-making which is based not only on the available evidence but also on patient characteristics, situations, and preferences. It recognizes that care is individualized and ever changing and involves uncertainties and probabilities.

EBP develops individualized guidelines of best practices to inform the improvement of whatever professional task is at hand. Evidence-based practice is a philosophical approach that is in opposition to rules of thumb, folklore, and tradition. Examples of a reliance on "the way it was always done" can be found in almost every profession, even when those practices are contradicted by new and better information.

However, in spite of the enthusiasm for EBP over the last decade or two, some authors have redefined EBP in ways that contradict, or at least add other factors to, the original emphasis on empirical research foundations. For example, EBP may be defined as treatment choices based not only on outcome research but also on practice wisdom (the experience of the clinician) and on family values (the preferences and assumptions of a client and his or her family or subculture).

Dr. Steenblock’s certainly meets the standard of doing EBP by virtue of the fact he has consistently based decision-making “not only on the available evidence but also on patient characteristics, situations, and preferences. It recognizes that care is individualized and ever changing and involves uncertainties and probabilities” and makes “treatment choices based not only on outcome research but also on practice wisdom (the experience of the clinician) and on family values (the preferences and assumptions of a client and his or her family or subculture”).

Doctors doing EBP also draw on and incorporate findings from clinical studies with an emphasis on ranking the evidence by the quality of the studies. This is discussed in a Wikipedia entry titled “Evidence Based Medicine” which can be accessed by clicking this link: http://bit.ly/KL3xf6

Dr. Steenblock also does this. However, he is an experimentalist who out of necessity deals with intractable, untreatable (by conventional medicine anyway) patients whose dire medical situations regularly sends him on a quest for viable treatment options. These treks have led him to ferret out
treatments buried and forgotten in the medical and scientific literature as well as to develop new therapies based on his extensive physiology, biochemistry, pathology and medical background and experience. The information Dr. Steenblock has unearthed and the discoveries it has spawned recently led him to wryly comment that “Were I to do medicine as the skeptics and critics advocate none of the progress I’ve made over the past four decades would have come to pass. And a great many of my patients who surmounted devastating, even terminal illnesses and grim diagnoses would likely be occupying cemetery plots instead” in an article titled “Wholistic Medicine: Unstoppable juggernaut or losing ground to prescription pad doctors & quackbusters?” which can be accessed at http://bit.ly/JASPH3.

With regard to Dr. Barrett’s comment that “Steenblock, however, includes treatments that have no scientifically plausible rationale and have not been demonstrated to be effective. What's more, some of the conditions he claims to treat do not have any proven effective treatment“:

The only treatments cited in Barrett’s article were those listed in the Cancer Control Society biographical statement (which was written by one of Dr. Steenblock’s clerks) plus an entry on Biomeridian testing:

“…bone marrow stem cell therapy, hard chamber hyperbaric oxygen, intravenous glutathione, chelation of all types, pulsed electromagnetic therapies, external counterpulsation, intermittent high altitude therapies, spinal disc decompression, nutritional therapies, etc.”

Some of these treatment modalities are no longer being used by Dr. Steenblock, mainly because he experimented with them and found that they were not producing outcomes that would justify patients investing time and money in them. Unfortunately, the biographical statement submitted by his secretary tied all of them into “the prevention and treatment of stroke, brain injuries, Huntington’s disease, Parkinson’s disease, multiple sclerosis, ALS, macular degeneration, cerebral palsy, autism, Alzheimer’s disease, heart disease, kidney and liver disorders, diabetes, anti-aging, etc.” If Dr. Steenblock were using all of them to prevent and treat each and every one of these medical conditions and disorders there would be more than a few instances of their lacking a “scientifically plausible rationale”. But their use is actually quite selective and informed by the published science and Dr. Steenblock’s experience and insight (EBP).

Like many very busy doctors Steenblock has to delegate tasks to underlings and in some instances leave things like biographical summaries or statements to them. Sometimes they run with things and get them wrong. How many super busy businessmen or doctors have had an underling or associate botch a biographical statement or report? In an ideal world a doctor could monitor and catch every mistake and oversight of this sort, but alas this is not a realistic expectation of a physician who sometimes spends 12 or more hours per day seeing patients and performing procedures and then many more hours in researching the medical literature searching for answers for his patients.

Regrettably, stuff happens – something that obviously bedevils Dr. Barrett’s websites given the kind and number of errors it contains especially with regard to Dr. Steenblock.
This leaves “biomeridian testing”.

Dr. Barrett had this to say about biomeridian testing in “A Skeptical Look at David A. Steenblock, D.O.”:

Proponents of such devices claim that they measure disturbances in the body's flow of "electromagnetic energy" along "acupuncture meridians." Actually, they are little more than fancy galvanometers that measure electrical resistance of the patient's skin when touched by a probe. The device emits a tiny direct electric current that flows through a wire from the device to a metallic cylinder that the patient holds in one hand. A second wire is connected from the device to a probe, which the operator touches to "acupuncture points" on the patient's other hand or a foot. This completes a low-voltage circuit and the device registers the flow of current. The information is then relayed to a computer screen that provides an interpretation of the findings and suggests products the patient can take. The Biomeridian and similar devices provide no useful information about the patient's diagnosis or treatment [5].

Dr. Steenblock did utilize biomeridian testing at one time, again, as an investigational tool whose results he compared to conventional medical test outcomes, but had actually stopped using before Dr. Barrett’s 2009 visit to his website. During the time Dr. Steenblock used this computerized device his focus was to see if it helped reveal anything about the effects of bone marrow aspirate (BMAC) treatments on neurologic patients. To do this he assessed specific bodily “bioelectrical circuits” before and after the intravenous administration of stem cell-rich bone marrow. This information was not published but did gel with conventional tests that supported Dr. Steenblock’s belief that bone marrow stem cells would improve a patient’s overall nerve functioning.

However, as mainstream medical and FDA opposition to biomeridian and similar testing was mounting Dr. Steenblock shelved it entirely. The entry was expunged from his website but obviously not before Dr. Barrett zeroed in on it for his article.

Many doctors have asked how Dr. Barrett can be so certain about the worthlessness of biomeridian or bioenergetic testing in the absence of careful experimentation and without apparently reviewing the double blind studies whose findings support its effectiveness in determination of food allergies, e.g., Ali M, ‘Correlation of IgE Antibodies with Specificity for Pollen and Mold Allergy with Changes in Electrodermal Skin Responses Following Exposure to Allergens’, Am J Clin Pathology1989; 91(3):253-259, Bernstein M, ‘Double-blind Food Challenge in the Diagnosis of Food Sensitivity in the Adult’, J Clin Immunology 1974; 54:165, A double blind, randomized, controlled investigation of electrodermal testing in the diagnosis of allergies (J Altern Complement Med. 1997 Fall;3(3):241-8).

In an article by Barrett titled “Quack “Electrodiagnostic” Devices” he cites as scientific evidence against it one double blind study in which “British researchers compared its results with a Vegatest device to those of conventional skin-prick testing in 30 volunteers, half of whom had previously reacted positively for allergy to cat dander or house dust mite. Each participant was tested with 6 items by each of 3 operators in 3 separate sessions, a total of 54 tests per participant. The researchers concluded that Vegatesting does not correlate with skin prick testing and so should not be used to diagnose these
allergies.” Readers can access this study by clicking this link: http://bit.ly/Le2Urs. The problem with this – aside from the inference that a single study is sufficient to invalidate bioelectric testing – is the fact we really do not know if the machines used were operating properly and had been calibrated, nor do we really know if the operators were properly trained in their use or violated testing protocols.

It should be noted that conventional skin testing for food allergies is widely recognized as being almost worthless and yet continues to be utilized by allergists since insurance companies pay for this. Blood testing for IgE and IgG reactivity is the most accurate but are more expensive. Since the average general practitioner can order these blood tests and thus cut out the involvement of allergists, the allergists have exerted considerable pressure on insurance companies to not pay for these tests. This does two things: Puts more money into the allergist’s pocketbooks and decreases the expense to the insurance companies. Even though biomeridian and Voll electrodermal testing is far cheaper than skin testing and blood testing, allergists will continue to lobby to keep them banned and by so doing help insure that they can continue to make money on pretty much worthless testing.

At present thousands of physicians and other kinds of health care practitioners use electrodermal testing to help people. Are all of these thousands of providers and their patients delusional? In-a-way Dr. Barrett has set himself up as the final judge of what works and what doesn’t with little or no background in the use of these devices from either a practical or theoretical point of view, with his opinion bolstered by findings in a single double blind study (Again, confirmatory studies were not mentioned or reviewed though they exist in the literature including PubMed). If the use of all medical devices were held to this standard – this kind of evaluation -- one can’t help but wonder how many would be outright banned?

**ORAL CHALLENGE TESTING FOR FOOD ALLERGIES: ESCHEWED BY U.S. ALLERGISTS BUT APPROVED IN JAPAN AND OTHER COUNTRIES**

Many doctors feel the most reliable food allergy test is the oral challenge test. This involves patients consuming a small quantity of various foods while being monitored for any untoward reactions by a physician experienced in dealing with allergic reactions including anaphylaxis. This kind of testing is not something most allergists in the US do but which is approved in countries such as Japan. In a paper which appeared in *Allergology International* (Official Journal of the Japanese Society of Allergology) in December 2009 it was noted that “After the release of the guideline, oral food challenge tests were approved as a medical examination on hospital admission by the national health insurance system in 2006, and the tests at outpatient clinics were also approved in 2008”. The paper in its entirety can be accessed by clicking this link: http://ai.jsaweb.jp/pdf/058040475.pdf

Barrett’s litany of “skeptical objections” to Dr. Steenblock’s work continues with a focus on hyperbaric oxygen and stem cells:

The treatments that seem to interest Steenblock most are hyperbaric oxygen therapy and stem cell therapy. According to an article on the Stroke Doctor Web site:

Strokes are caused by a lack of oxygen to a part of the brain. Long term effects are caused by the continued lack of oxygen, the swelling of brain tissue and the accumulation of calcium within the damaged nerve cells. Dr. Steenblock's neuro-rehab program is designed to bring oxygen back to these starved cells, reduce swelling, and provide the nutrients needed to help the cells remove their waste and restore normal metabolic function [6].

It is true that strokes are caused by lack of oxygen to the brain. However, there is no scientific evidence that increasing oxygen delivery to the brain after an acute episode is over can stimulate cells to regenerate.

Notice that the website quote Dr. Barrett employed says nothing about the use of hyperbaric oxygen to regenerate cells and instead focuses on the use of HBOT to reduce swelling and promote a resumption of normal metabolic function, yet he (Barrett) writes as though Dr. Steenblock is claiming HBOT “can stimulate cells to regenerate”. Interestingly, the Wikipedia entry for “Regeneration (biology)” http://bit.ly/bkvJ3z states, “In biology, regeneration is the process of renewal, restoration, and growth that makes genomes, cells, organs, organisms, and ecosystems resilient to natural fluctuations or events that cause disturbance or damage” and “Regenerative strategies include the rearrangement of pre-existing tissue, the use of adult somatic stem cells and the dedifferentiation and/or transdifferentiation of cells, and more than one mode can operate in different tissues of the same animal. All these strategies result in the re-establishment of appropriate tissue polarity, structure and form.” This definition is an exact description of what hyperbaric oxygen does for stroke patients. The National Library of Medicine lists over 500 papers with respect to hyperbaric oxygen and regeneration and nine papers using the terms in combination with brain damage from ischemia (the cause of most strokes).

Barrett also discusses HBOT use with respect to “an acute episode” despite the fact Dr. Steenblock's practice with respect to stroke and almost all his stroke-related website content is focused on chronic stroke.

While the use of HBOT for chronic stroke is controversial since there have not been sufficient double blind studies to reach conclusions concerning efficacy, it certainly cannot be dismissed willy-nilly as being ineffective. This perspective is reflected in an Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services document titled “Hyperbaric Oxygen Therapy for Brain Injury, Cerebral Palsy, and Stroke” (Evidence Report/Technology Assessment No. 85):

“Evidence from well-conducted clinical studies is limited. The balance of benefits and harms of HBOT for brain injury, cerebral palsy, or stroke has not been adequately studied. Future research of HBOT should
include dose-ranging and safety studies to establish the optimum course of HBOT to evaluate in outcome studies.” From the Summary section (page 5)

Dr. Steenblock, who has been doing HBOT for various neurologic conditions since 1989, has seen HBOT effect clinically significant improvements in a large enough population of patients to compel his continued reliance on it right on up to the present (2012). The real question for any physician who has watched chronic stroke patients regain their lost functions during a 6-8 week course of daily hyperbaric oxygen is why would they deny what they have seen with their own eyes? Do you tell yourself that your patients are delusional and their restored ability to walk, speak or see is due to “wishful thinking”? Or does a doctor listen, watch and carefully observe and then use what works to help his patients no matter what critics say about the lack of scientific evidence? Most rational people would likely say to run with what is safe and works and ignore the skeptics, critics and naysayers!

**Late Treatment of Severe Brain Injury** (Journal of American Physicians and Surgeons, Volume 10, Number 2, Summer 2005)

**BRIEF REVIEW OF HYPERBARIC OXYGEN FOR STROKE REHABILITATION** by David A. Steenblock, D.O.

Summary of patient responses at Dr. Steenblock’s clinic presented as a Poster Session titled “Improved therapy for Rehabilitation of Stroke” given by Dr. Steenblock at the National Stroke Association Ninth Annual Stroke Rehabilitation Conference

Video: Hyperbaric Oxygen Explained

Video: Stroke patient Joe Beschen discusses his turnaround following HBOT

This body of information and evidence will not satisfy hard core skeptics and isn't expected to. The off-label use of HBOT by Dr. Steenblock and other physicians for chronic stroke and other neurologic maladies is part of a venerable tradition in medicine; namely, the kind of in-office therapeutic experimentation with safe natural therapies that history shows has lead to a great many novel insights and discoveries. Remove or seriously curtail this sort of hands-on, informal clinical research and medical progress (especially suffering patients) will suffer for it.

Dr. Barrett next takes exception to Dr. Steenblock’s work with stem cells:

Steenblock’s sites list more than 100 diseases that they claim stem cell transplantation can treat. Stem cell therapy is certainly a promising area for research [7,8]. Stem cells have the ability to give rise to many specialized cells in an organism. Certain types of stem cells are already used to restore blood-forming and immune system function after high-dose chemotherapy for some types of cancer, and several other restorative uses have been demonstrated [9]. The broadest potential application is the generation of cells and tissues that could be used to repair or replace damaged organs. If scientists can learn how to control stem cell conversion into new, functionally mature cells, doctors might be able to cure many diseases for which therapy is
currently inadequate. However, Steenblock's claims go way beyond what is likely and should be regarded with great skepticism.

There is an entry on Stemcelltherapies.org that is part of Dr. Steenblock's nonprofit namesake research institute (Steenblock Research Institute) that lists about 100 diseases and medical conditions “treatable by Stem Cell Transplantation. Compilation from The National Donor Program, 2002 and www.stemcelltherapies.org, 2004” that can be found at http://bit.ly/M7dV0O. Most of the entries come from the National Donor Program list.

If the “claims” that Dr. Barrett takes exception to is that stem cells can treat or potentially treat over 100 diseases and medical conditions then his disagreement is with the compilation of conditions by the National Donor Program. This and scores of published papers on the safety and therapeutic utility of bone marrow and umbilical cord stem cells including bone marrow aspirate in a wide variety of diseases and medical conditions.

Dr. Steenblock’s involvement with adult (nonembryonic) stem cells dates back to 1969 when he spent three months working in the Department of Hematology at the University of Washington where much of
the original work on bone marrow transplants was done. Since 2000 Dr. Steenblock’s stem cell work has had two primary clinical facets:

(1) He has worked as a consultant and adviser to clinics in Mexico and elsewhere that administer pure umbilical cord stem cells to patients with a variety of neurologic, ocular and other challenges. One of the clinics Dr. Steenblock served was the International Spinal Cord Regeneration Center (ISCRC) in Tijuana, Mexico whose medical director is Fernando Ramirez Del Rio, MD. During the course of Dr. Steenblock’s involvement with ISCRC he was part of an open pilot study (2004) involving the use of pure umbilical cord stem cells in eight children with cerebral palsy. This study was written up and appeared in the journal *Medical Hypotheses & Journal* in 2005 (Click to access: [http://bit.ly/M7aKWR](http://bit.ly/M7aKWR)). In 2005 Dr. Steenblock co-authored a book on umbilical cord stem cell therapy that focused on patient case histories gleamed from Dr Ramirez’s stem cell work titled “*Umbilical Cord Stem Cell Therapy: The Gift of Healing from Healthy Newborns*” (Click to access the Amazon.com entry on this book: [http://amzn.to/M2bEAG](http://amzn.to/M2bEAG)).

![Umbilical Cord Stem Cell Therapy: The Gift of Healing from Healthy Newborns](image)

Dr. Steenblock’s consultancy relationship with ISCRC ended in 2010. He presently serves as a medical and technical consultant to stem cell-focused treatment programs both here in the USA and around the world.

(2) He was one of the first physicians in the US to begin systematically harvesting patients own stem cell-rich bone marrow and treating them with this for a variety of chronic health conditions. Since he does not process the bone marrow in ways that violate FDA rules governing this (“minimum manipulation”) his approach is fully legal. Click to read an article that one of Dr. Steenblock’s attorneys, Richard Jaffe (J.D., Columbia University School of Law), wrote on this topic: [http://bit.ly/yC3Dab](http://bit.ly/yC3Dab)

As you might expect Dr. Steenblock has accumulated a great deal of case history as well as testimonial information and data on patient responses to both umbilical cord stem cell therapy (done abroad) and BMAC done in his clinic in Mission Viejo, California. Critics have dismissed this sort of evidence as worthless or close to it. However, this does not square at all – not even with what many quackbusters have written and said. In an article titled “*Science vs. Alternativism*” posted on Quackwatch, writer Gregory L. Smith, MD states that:
“Testimonials can be great places to start looking for answers, but they should not be considered the end of the journey. Many scientific discoveries start with an observation that leads to a hypothesis that eventually can be tested with a randomized controlled trial”. Dr Steenblock’s pioneering work with hyperbaric oxygen is one such example since it now is moving into double blind clinical trials for treating stroke and traumatic brain injury.

Despite the limitations of anecdotal evidence, there has been so much of it accrued by Dr. Steenblock with respect to the use of umbilical cord stem cells and BMAC (for various conditions) that it would be injudicious for him not to share this and encourage suffering people to avail themselves of it. If Dr. Steenblock’s factual reporting of his cases (claims) “goes way beyond what is likely” (to paraphrase Dr. Barrett) then perhaps Dr. Barrett should considering coming and working alongside Dr. Steenblock to determine for himself whether patient outcomes exceed what is likely. Dr. Steenblock would actually welcome this and is confident Dr. Barrett would find himself readily admitting that what he has characterized as unlikely is actually happening at Dr. Steenblock’s Clinic.

One of the more interesting and paradoxical things that seems to crop up in many skeptical reviews and critical articles are statements that are inaccurate or which otherwise misrepresent the subject being discussed, sometimes by virtue of the writer’s approaching their “target” almost in debate class fashion where winning counts but at the expense of truth or fairness.

In writing about the paper mentioned on the preceding page concerning the findings of an open pilot study involving eight (8) children given injections of pure cord blood stem cells, Dr. Barrett wrote:

This report states that parents completed questionnaires before the treatment and at 1, 3 and 6 months afterwards and that the children's own therapists submitted evaluations to SRI for analysis. It further states that all eight children showed clinically significant improvement, but it does not tabulate the outside therapists' observations. Although its findings are interesting, the report should not be promoted as evidence of effectiveness. At the very least, a study of this type should include complete physical evaluations before and afterwards by independent observers. It is also important to know whether any improvement could have occurred as a result of other treatment or the natural history of the ailment. That would require a comparison between treated and untreated children.

While many of Dr. Barrett’s comments are certainly valid it would have been nice had he quoted from the paper itself in which the authors including Dr. Steenblock admit the study’s limitations and the need for further research:

From the abstract:

“According to parent tendered observational re-ports, none of the children had graft versus host reactions. Eight out of eight children showed some improvement in mobility and/or cognitive function. Six children (75%) were rated as improving in muscle tone, hip movement, leg movement, rolling to the side, balancing while sitting and balancing while standing by the end of the six month follow up. Further
research, correlating parent ratings with tomography studies and physical therapy evaluations, seems warranted”.

And from page 6 col. 1:

“Further, more rigorous research into the promise and utility of human umbilical cord stem cell use in addressing various neurologic disorders (and the mechanism or mechanisms underlying efficacy) including cerebral palsy, seems warranted.”

While not constituting “hard” evidence of causation, there were some highly compelling clinical improvements in two (2) of the children that any review or news article should mention:

“During the study one aphasic child started talking and one child who had been blind from birth due to optic nerve atrophy was able to see by month six post-treatment. Interestingly, an ophthalmologist who saw the child many months prior to his cord blood stem cell treatment reported that the child would never see. Four months after his injection he tracked a ball rolling across the living room of his family home. Two weeks later a second ophthalmologist at a major Florida university eye institute reported that the child could see and recommended glasses. These improvements were faithfully reported by the parents. “

In addition, there was this sentence which signals the fact the authors readily acknowledged the tentativeness of this study:

“The main objective of this pilot study was to begin quantifying results, especially in terms of safety.”

What is interesting and also rather hypocritical is that some stem cells experts back in 2003-6 basically called Dr. Ramirez’s use of cord blood stem cells to treat cerebral palsy in children just so much “smoke and mirrors”, and then turned around and pursued funding to test the use of cord blood or cord blood derived stem cells in animals and humans. Some even sent patients to Dr. Ramirez on the Q.T.

On January 8, 2012 60 Minutes aired an investigative segment titled Stem Cell Fraud: A 60 Minutes investigation that focused on a doctor who allegedly sold umbilical cord stem cells to a couple in Florida whose son has cerebral palsy. At one point the segment’s lead investigative reporter Scott Pelley brought up stem cell treatment offerings on the Internet with stem cell expert Joanne Kurtzber, MD (Duke University):

Scott Pelley: You know, I wonder how often it happens that you have to tell a patient, 'I'm sorry. There's nothing we can do.' And then they come back to you two days later and say, 'Well, I see all these cures on the Internet.'

Dr. Joanne Kurtzberg: I get many of those calls and emails and, and, see many of those patients. But it's very dishonest to mislead people when there's nothin' you can do.

“Nothin’ you can do” seems to fly in the face of what appears on the Web concerning Dr. Kurtzberg’s work with cord blood and cord blood stem cells for cerebral palsy:
“Kurtzberg says that of the children she has treated so far, only Dallas and one other child have made such dramatic improvements.”

“This research also lends support for the pioneering clinical work at Duke University, focused on evaluating the impact of autologous cord blood infusions in children diagnosed with cerebral palsy. Dr. Joanne Kurtzberg, a professor of pediatrics and pathology and director of Duke’s Pediatric Blood and Marrow Transplant Program, is infusing the child's cord blood stem cells back into the body in an effort to facilitate repair of brain tissue damaged by perinatal hypoxic (oxygen-deprived) events. To date, more than 20 children have participated in the experimental treatment.”

“The Levines were in luck: Dr. Joanne Kurtzberg, a professor of pediatrics and pathology at Duke University, was conducting a study where children with cerebral palsy were injected with their own cord blood cells.”

“Kurtzberg and Team Move Forward With Cerebral Palsy Cord Blood Study - 2010

“Duke researchers are exploring a stem cell treatment they hope will help children with cerebral palsy.”

“Katie was six months old when she was diagnosed. Her parents say she started to make more progress when she got stem cell treatment from Duke University.”

It would seem that work with cord blood stem cells done outside a particular venue constitutes “smoke and mirrors” (A scam) while that done in proscribed settings (university labs, hospitals and research clinics and centers) is genuine and bona fide.

Maybe some of the things being so quickly dismissed are legitimate discoveries; the kind that medicine should welcome, once did, but now does not – at least in some quarters (This at least is how many mainstream doctors and researchers react to anything discovered outside their purview or control or that seems to fly in the face of accepted “truths” or “established facts”), e.g. “That can’t be true since I have never heard of it!”

Returning to “A Skeptical Look…” Dr. Barrett’s critical examination of Dr. Steenblock and his work also included this concerning his early work with bone marrow aspirate:
Near the end of 2006, Steenblock began administering stem cell therapy himself by withdrawing fluid from the bone marrow and injecting it back to the patient intravenously. In a 2007 lecture delivered in the United Kingdom, he stated that he had originated this method and that any doctor could use it [14]. The StemCell.md site has an interesting testimonial for "Emily," a 16-year-old girl who underwent this procedure.

- Emily had right-sided disability and spasticity since birth.
- She was treated by removing 300 milliliters of bone marrow from her hip and giving it back to her intravenously.
- Five hours after the raw bone marrow infusion, she was able to move her right toe for the first time in her life.
- That evening, she was able to walk, stepping heel to toe on her right foot.
- By the next day, she was able to straighten out and use her right arm and wrist for the first time.
- Within three weeks, she was also able to move her fingers on her right hand and hold a cup for the first time.
- She has continued to improve on her walking rhythm and is also running [15].

In an videotaped interview recorded the day after her stem cell treatment, Emily and her mother give a glowing report [16]. Her appearance, however, is unpersuasive. Although they talk about how she can unclench her right hand, straighten her right elbow, and raise her right arm—all of which they say she could never do before the treatment—she demonstrates none of this during the recording. Moreover, the idea that transfused stem cells are responsible for such rapid improvements is questionable. If cells are actually removed from the marrow and injected intravenously into a person, they would simply not gravitate toward and fix damaged organs in a single day or so. Many, in fact, would be filtered out by the spleen, circulate back to the marrow, and/or simply die. The Web site does not say when Emily's treatment took place, but the video was uploaded to YouTube on August 13, 2009. It seems probable to me that her testimonial is an expression of wishful thinking.

Payne readily acknowledges that stem cells could not be directly responsible for an improvement within hours, but he speculates about other mechanisms [17].

Unfortunately, the individual who conducted and taped the interview Dr. Barrett reviewed was a web designer and not a reporter or professional videographer (The interview was posted without Dr. Steenblock’s having been given a chance to review it. The staff member in question subsequently left Dr. Steenblock’s employ). While focusing on eliciting answers to questions he failed have Emily get up and demonstrate her new found and improved bodily functions. The simple fact is both Emily and her
mother were not the victims of wishful thinking. How can having your toes start to work for the first time in 17 years constitute wishful thinking, anyway?

About one year after the videotaped interview in question was done Emily returned to Dr. Steenblock’s Clinic for a second bone marrow aspirate concentrate (BMAC) treatment and was interviewed by Dr. Steenblock. During the course of their 8m: 46s exchange Emily discussed and illustrated the type and degree of improvements she had experienced since having her (first) BMAC. This interview can be accessed by clicking this link: http://bit.ly/KeaNO3

The clinical responses of people with cerebral palsy treated with BMAC has been so consistently impressive that Dr. Steenblock took the unprecedented move of offering a money back guarantee on it in 2012 (Click this link to access: http://bit.ly/NEjGlZ). This appears to be the first such money back guarantee ever offered on a stem cell-related treatment.

Dr. Barrett continues his look at Dr. Steenblock with a section titled “Disciplinary Actions” which kicks off with this salient comment:

“Steenblock has been disciplined by his state licensing board three times and is now serving 5 years' probation.”

Details follow but nothing is said about various articles published beginning in 2005 that bring into question the fairness of these decisions and even supply missing information and mitigating factors. Many of these readily turn up on Google searches going back many years (Though some were lost when Geocities and other websites were closed). Readers need not go on a quest to find this, as all this information has been distilled down in an article aptly titled “Goliath v. David”: http://bit.ly/JCUKuA

At the end of “A Skeptical Look...” Dr. Barrett offers his bottom line concerning Dr. Steenblock and his work which ends with “This article summarizes why I am skeptical of his offerings”.

As you have seen there is good cause to be skeptical of Dr. Barrett’s article. Some who have looked closely at Quackwatch’s content have argued that technical errors, lack of objectivity, incomplete information and data, unsupported opinions and innuendo abound. Among them is Dr. Joel M. Kaufman (Department of Chemistry & Biochemistry, University of the Sciences, Philadelphia, PA) who has posted his thoughts on various web sites including http://bit.ly/MddeCt.

Readers might want to ask themselves if Dr. Barrett’s articles are really protecting medical consumers or misinforming and even misleading them?

**ADDITIONAL READING**

Anecdotal evidence and observational studies are regarded by some researchers as a more reliable means of discovery and explanation than formal studies. One very cogent paper on this subject is “Observational Research, Randomised Trials, and Two Views of Medical Science” that appeared in the *PLoS Hub for Clinical Trials*. It can be accessed by licking this link: http://bit.ly/M8WwEV
“Wholistic Medicine: Unstoppable juggernaut or losing ground to prescription pad doctors & quackbusters?” by Dr. David Steenblock which can be accessed at http://bit.ly/JASPH3

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