

Chlorine Dioxide in Solution (CDS)

Personal Experience

AIM of investigating low dose CDS:

- To assess side-effects
- To assess potential benefits
- To assess availability, cost and ease of use.

I could not get hold of a reliable supply of CDS 3000 ppm. KV-lab <https://kvlab.com/chlorine-dioxide-products/> sells CDS as well as the raw materials for making it yourself within the US. However, it does not ship abroad. Andreas Kalcker's team do not recommend any commercial product and COMUSAV makes its own. I did not get any reply from the COMUSAV members I contacted.

I was only able to get a very dilute preparation from Life Systems [Water Purification Drops | Water Treatment Drops | Lifesystems](#) Whereas the sodium chlorite used for preparing CDS 3000 is 25-28%, the Life Systems product is only 2.9%. So, it is only about a tenth the strength. It was enough to begin my investigations. This product is often not in stock.

Life Systems only sell the product for water purification. There are two bottles in the pack –Sodium Chlorite @ 2.9% and Hydrochloric Acid @ 4%. For each litre (1000 ml) of water, you use 12 drops from each bottle as instructed. You premix the chemicals, leave them for 10 mins to form the chlorine dioxide (ClO₂) and then add this mix to 1 litre of water.

The assumption is that you consume the litre in the day. I was not proposing to take that much to start with. Since ClO₂ is a gas which will evaporate, I decided to make less than a litre at a time as follows:

Batch 1 this lasted a week:

Sun 14 Feb 2021: 3 drops each in 250 ml of water to retain the same concentration. To start with, I took only a 5 ml dose in 100 ml of pre-boiled and cooled water on an empty stomach last thing at night.

The only reaction I had was a dry mouth – but I no longer had this reaction after a few days.

Mon 15 Feb: 10 ml in 100 ml am and night – burping & dry mouth. This is similar to the reaction you get if you take sodium bicarbonate.

Tue 16 Feb: 15 ml in 100 ml first thing on empty stomach and last thing at night. Dry mouth and slight stinging in mouth. ClO₂ is approved for use in mouth washes and the daily dose is much less than that allowed for potable water. So, I ignored this.

Wed 17 Feb Up to 20 ml in 100 ml, am and pm

Itching and burning, like phlebitis, along long saphenous vein on left leg where varicose veins were lumpy. Itching and burning of left dorsal venous arch of foot, which had been blue black and protruding for several years after I dropped a 21 kg suitcase onto my left foot. In the morning, I noticed that this vein had turned from blue black to green, which shows oxygenation. No change in right leg and foot. Slight irritation in tummy but no nausea.

Thu 18 Feb Up to 30 ml in 100 ml water am and pm

No additional reactions

Fri 19 Feb Same as Thu.

Left dorsal venous arch no longer continuous blue - looks like string of adjoining blue green beads or studs.

Sat 20 Feb: stepped down to 20 ml in 100 ml – am, afternoon, pm

Difficult to tell if there is a difference

Sun 21 Feb: 10 ml in 50 ml – am, pm (forgot afternoon)

Vein more faded and bead-like clots spaced out because a little smaller. Playable air pockets above clots.

Mon 22 Feb: Finished off what was left of batch1 - probably all CDS evaporated by now.

The two largest clots at the end of the visible left dorsal venous arch, had shiny circular crusts on them to start with. They used to be sensitive if I pressed on the vein. They are still there but not that sensitive now. All this has happened over the course of a week. During this time the vein behind leg on calf which had been black with clots, had completely cleared. The long saphenous vein on inner side of calf was breaking up into bubbles over a larger area.

The strange thing is that only the saphenous vein and the branch extending under the arch of the foot in the left leg showed a marked response. The right leg does not look any different.

Batch 2

23 Feb 21 am: still 3 drops each of liquid into 125 ml of water (double strength). Since I was using very few drops, Malcolm suggested that I drop them straight into the water instead of pre-mixing them.

This time I stuck to just 10 ml of CDS in about 100 ml of water per dose – am, mid-afternoon and pm (when I remembered).

Again, some sensation along veins and in feet – slight burning along veins. Only veins in left leg seem to be changing – puffiness along vein – so vein looks faded but can still make out the clots, , especially at night but they seem smaller. The fact that the itching and burning did not occur during the latter part of Batch 1, suggests that the CDS evaporates over the week despite storage in the fridge. More circulation to hands and feet, which look pink.

25 Feb 2021 – same protocol. I stopped keeping a diary but wish I had.

Did the CDS improve my eye health – or was it a coincidence? In 2018, when I had a scan of my eyes following diagnosis of diabetes, my vision was blurred and I had difficulty reading the computer screen and could just about read road sign across the road. I was told I had wet AMD and cataracts in both eyes – and had to sit a DVLA test to continue driving, which I scraped through. I could barely read the road sign across a junction or the number plate of the car opposite our house from our window although I could still just about read it from the 25 yards. Also, I could not look into bright light which was dazzling and blinding, irritating the eyes – this condition is called photophobia.

The sight varies with atmospheric conditions. The eye exercises helped the eye focus and steady the gaze. When I started taking bicarbonate of soda (another oxidiser which has a drying effect) in 2020 and started eye exercises, my vision improved and I could read the road name and number plate from inside the room, well away from the window.

An eye test in Feb 2020, showed that my vision had improved from 6/12 to 6/9 but I was guessing and the consultant said that it was a fluke since I still had fluid at the back of both eyes. Given the 6/9 vision, no anti-VEGF injections into the eye were started.

When I saw the consultant on 19 April 2021, I could easily read 6/9 but not the next line. The remarkable thing was that my lazy left eye, which could only see the top letter in the past, was able to read the first 3 rows instantly and clearly with the pinhole cover over the glasses. The current diagnosis is **spontaneous recovery from Wet AMD** – now have dry AMD which could turn to wet AMD again in future.

I had not been doing the exercises and paying much attention to the sight. On re-checking, I realised that I only had very slight photophobia, probably caused by the fluid scattering the light. I had previously assumed that it was caused by the cataracts. I could still read the road sign and car number clearly from inside the room except when the sun was reflecting off them. To my surprise, I found that I could just about make out the letters WITHOUT my spectacles – i.e. I was beginning to see without glasses what I could just about see with glasses in December 2018.

MY OPIONION (which the consultant does not agree with):

After I had the bad flu from Jan to Mar in 2018, I was diagnosed with diabetes. I refused treatment but went for all the tests, which is when the wet AMD was observed. The blood sugar level fell over the course of 6 months without intervention (not even a change to diet). I also had a flare up of varicose veins during the flu and I knew from the fluctuating light that my sight had been affected. I assumed that it would recover when I got over the flu.

I now think that in the same way blood clots developed on the leg veins, there might have been some small clots formed in the eye when I had the flu. This is quite common and my husband lost his right eye after a central vein retinal occlusion – which effectively means that light to the retina was being obstructed by a clot in the vein. This can cause bleeding, the growth of other potentially blinding compensatory blood vessels in the body's attempt to drain the eye, glaucoma and damage to the optic nerve. This and too much laser surgery eventually blinded my husband's right eye, which has collapsed.

Even a very weak dose of CDS was clearing the veins and improving the circulation to the feet as evidenced by the soles turning pink and the hard skin resolving. So, I am inclined to think that the flu had caused some clots in the tiny veins of the eye causing a build-up of fluid. The CDS is clearing these clots like it has done on the feet allowing the eye to dry. It may all be a co-incidence but given that the weak doses of CDS involved, which did not cause any adverse effects on health, I would be inclined to turn to CDS if I developed wet AMD again and defer medical treatment. If it was the CDS, it is very fast acting, since the eye had cleared within 2 months of starting to take CDS. However, after I reduced the dilution to 10 ml in 100 ml of water, the clots seem blue again. This suggests that 10 ml is perhaps too weak.

Batch 3: 4 drops in 125 ml of water. 4 drops gives a concentration of 1 mg of ClO₂ in 1 litre of water. This made it easier to work out the strength of the dose. I used less water (double dose) to finish the mixture off before it evaporates. Whereas the CDS was lasting about a week at the early stage of the experiment, the current mix only lasts about 3 days. Given the positive effects on me, I started giving 5 ml in 100 ml on an empty stomach in the morning to my husband. He has had no adverse effect to date but apart from less sleepiness (due to medical conditions and being unable to tell night from day) and a bit more energy I have not noticed any other positive effects either. The benefits could be due to the improving weather and not the CDS. Also, the amount of CDS he is having is perhaps far too weak.

Given that I do not have a medical problem, I will just finish the initial pack I bought and then go back to bicarbonate of soda when needed.

Other effects

1. I am allergic to a lot of things, including items of food. After I went to the Eye Centre, I had small hard pimples, like [milia](#), in a line from the nose corner of the right eye extending down to over the lips and to the chin. I tried various things but could not get rid of them. I believe that it was the body's attempt to isolate toxic chemicals and stop them from entering the wider circulation. I noticed that all except one spot had resolved by a month after I started taking ClO₂. Yet, it had

no impact on skin tags. My husband had liquid-filled pimples along the same line when he was having treatment for his eyes. It eventually broke out into an extensive facial rash, like Rosacea. In the [image on the right](#) you can see the Rosacea and some milia.

2. When I dropped the 21 kg luggage case on my left foot (I think it was in 2009), it was badly bruised and cut. By the end of May 2021, only a patch of skin the size of a pea was still discoloured. In Sep 2021, I attended a diabetic clinic. Previous ultrasound scans showed impaired arterial circulation in my left foot. This time around, the arterial blood flow was normal even if not as strong as in the right foot.

My conclusions:

- **Is it safe?** I have not taken the therapeutic doses recommended by Kalcker. The Life Systems pack will give 3 mg/litre/day for 60 days. The therapeutic dose is 20 to 30 mg per day. I was only having around 0.3 to 0.4 mg per day maximum. I had symptoms like phlebitis but it appears it was due to healing and increased circulation since there was no inflammation – only air pockets over the clots in veins. I had no adverse effects but see [Warnings](#) since some people may be sensitive to the therapeutic dose.
- **Is it effective?** In my case even very weak doses taken on an empty stomach seemed to resolve blood clots. Since CDS thins the blood, resolves coagulation and improves circulation, COMUSAV may be right in claiming that it cures COVID in higher doses, since both the vaccines and the virus have caused blood to clot causing DVT, strokes, cardiac problems, multiple organ failure etc. By preventing clotting, CDS probably also stops the virus infection causing a cytokine storm by modulating any over-reaction of the immune system. There have been reports that other oxidising agents, like Sodium Bicarbonate and Hydrogen Peroxide, act similarly.
- If someone is suffering from blood stasis and clots, it is worth trying these oxidising agents although bicarbonate of soda did not clear the vein in my foot. I have not experimented with Hydrogen Peroxide and look forward to others sending in reports if they do.
- **Is it easy to buy?** The sale of ClO_2 at the concentrations needed is banned in the USA, Canada, Australia and UK – and perhaps other countries. More experiments need to be undertaken to assess whether weaker doses will be effective against pathogens.
- **Is it costly?** The packs only last for 3 to 6 months unopened. They are more expensive than the other oxidising agents and difficult to get hold of. It is not the cheapest oxidising agent. We need more anecdotal evidence (given a lack of willingness by regulators to conduct clinical trials) to assess cost/benefits. As I noted earlier, bicarbonate of soda had no effect on my veins – so costs may not be the critical factor.
- **Is it easy to use?** If you can obtain pre-prepared CDS then yes. Otherwise, you need to mix sodium chlorite with an activator like I had to do. It is difficult to mix accurate weak dosages. Since the concentrations of the sodium chlorite vary, the user has to calculate equivalents – this is not easy since the information given do not relate to the same units. Kalcker uses the same amounts of 25% sodium chlorite and hydrochloric acid. Life Systems use the same amount of activator with a much weaker sodium chlorite solution. I am not a biochemist and wondered whether this mattered. In his video on How to Make CDS, Kalcker shows the procedure used to measure the concentration of CDS. Most users will be put off by what appears to be a complicated procedure. Also, ClO_2 is unstable, which means the dosage may become uncertain if kept for longer than a day.