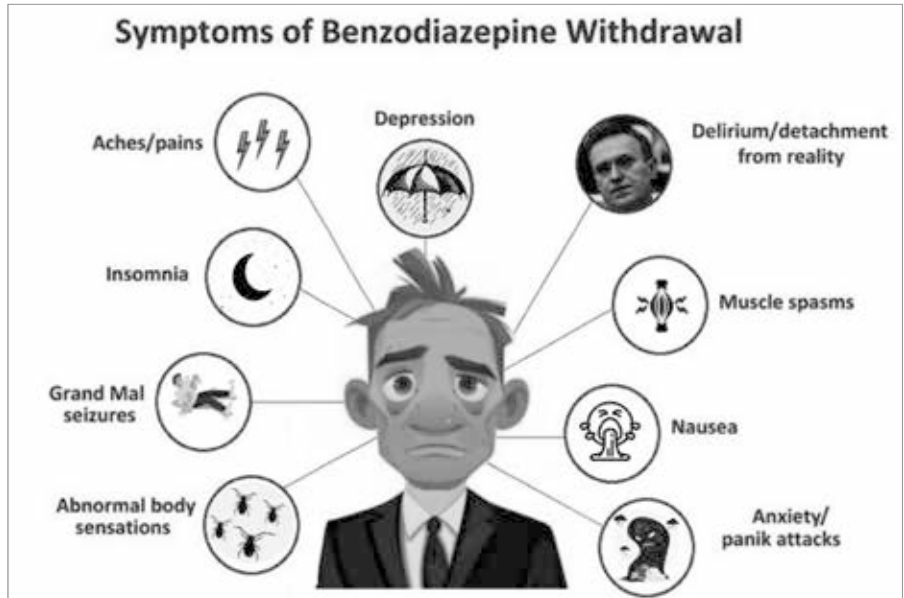


This text was first published on October 10, 2021 on [www.http://johnhelmer.org/](http://johnhelmer.org/) under the URL <http://johnhelmer.org/hair-raising-new-evidence-berlin-hospib>. License: John Helmer, Dances with Bears



Symptoms of Benzodiazepine-Withdrawal (Diagram: Fabienne Färber, created with Freepic.com on March 14, 2022, license CC BY)

Hair-raising evidence of German Doctors: Navalny's Lithium & Benzo addiction and Tropicamide-Poisoning

German clinical evidence of Alexei Navalny's chronic use of lithium and benzodiazepine drugs before his sensational collapse last year is being withheld and covered up by the Berlin doctors who obtained the evidence from testing a sample of Navalny's hair.

Autor: John Helmer

is an Australian-born journalist and foreign correspondent based in Moscow, Russia since 1989. He has served as an adviser to government heads in Greece (Andreas Papandreou), the United States (Jimmy Carter), and Asia, and has also worked as professor of political science, sociology, and journalism.



The significance of the hair testing was identified this month by an expert toxicologist employed by the British government. “[It] would be interesting,” he said, requesting his name not be released, “to see the hair test as this will reflect only the drugs given up to six days and more earlier in Russia.”

Dr Kai-Uwe Eckardt, the head of the team of German doctors treating Navalny in Berlin's Charité University Hospital, reported publicly last December that “a hair sample obtained on day 4 confirmed the presence of several of the compounds detected in blood and urine.” Day-4 in

Berlin meant August 24, four days after Navalny alleges he was poisoned in Tomsk by Novichok on orders of the Kremlin. Navalny's allegation was endorsed by the German, British and US governments on the evidence, they said at the time, of Navalny's tests in Germany.

This allegation was repeated last week at the Organisation for the Prohibition of Chemical Weapons (OPCW) in The Hague. According to an October 5 statement by a group of OPCW member governments, “it is now more than a year since Mr Alexei Navalny was poisoned with a nerve agent whilst travelling in

Russia. The OPCW Technical Secretariat confirmed, following a Technical Assistance Visit to Germany, that Mr Navalny was exposed to a nerve agent from the Novichok group. This is a matter of grave concern.” [1]

Led by Germany, the UK and US, the governments also charged that “the Russian Federation has not yet provided a credible explanation of the incident that took place on its soil.”

The Russian Foreign Ministry responded two days later, on October 7, charging the accusers of “inconsistencies, contradictions, misinformation, shady developments that have yet to be clarified, insinuations at the highest political level and outright lies professed by the West... a provocation, crudely planned and coarsely executed by the special services of some Western countries.” [2]

The significance of the hair sample testing by the German doctors is that the results corroborate lithium and benzodiazepine drug use in Navalny’s blood and urine found on his arrival in Berlin.

An independent British toxicologist adds that the levels of the drugs in the hair testing would also confirm Navalny’s dependence on these drugs in Russia, well before he arrived in Tomsk and long before the Novichok “incident” alleged at OPCW last week. “Without seeing the actual hair analysis report, we are guessing which specific drugs and compounds were common to the blood and urine and hair. The hair ones are all pre-attack compounds. If ‘several’ drugs were in the hair, as the Berlin report says, then Navalny would be described as a chronic abuser. That, plus his multiple bacterial infections the Berlin report also identifies, would make the trained professional clinician looking at the data believe that the patient was a down-at-heel street person with a serious drug problem and mental health issues.”

Medical psychiatrists and toxicologists acknowledge that the “cocktail” combination of drugs Navalny had been taking before he collapsed on August 20 may explain his subsequent symptoms and the cause of his collapse. Lithium, according to the British government toxicologist reporting last week, “would not be detected by normal drug screening and

must have been indicated for some reason to cause them [the Charité hospital doctors] to carry out as a special, targeted test. It would be interesting to know why it was tested for and the blood con-

centration – were the Russians treating [Navalny] for a bipolar disorder?”

Eckardt was asked to explain his reason for testing Navalny for lithium and benzodiazepines. He was also asked what

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Steindl D, Boehmerle W, Körner R, et al. Novichok nerve agent poisoning. *Lancet* 2020; published online Dec 22. [http://dx.doi.org/10.1016/S0140-6736\(20\)32644-1](http://dx.doi.org/10.1016/S0140-6736(20)32644-1).

| Substance | Urine | Blood |
|-----------------------|---------------|---------------|
| Fentanyl | positive | positive |
| Sufentanil | positive | positive |
| Morphine | positive | negative |
| Ofloxacin | positive | negative |
| Levofloxacin | positive | positive |
| Atropine | positive | negative |
| Gabapentin | positive | negative |
| Urapidil | positive | negative |
| Amantadine | positive | negative |
| Pilocarpine | positive | negative |
| Lithium | not performed | positive |
| Rocuronium | positive | negative |
| Alcohol | not performed | negative |
| Diazepam | negative | positive |
| Nordazepam | positive | positive |
| Oxazepam | positive | negative |
| Temazepam | positive | positive |
| Gamma-hydroxybutyrate | negative | not performed |
| Pentobarbital | negative | positive |
| Thiopental | negative | positive |

Appendix S2: Results of local toxicology and medication tests in blood and urine samples obtained on arrival of the patient at Charité – Universitätsmedizin Berlin (day 3). A hair sample obtained on day 4 confirmed the presence of several of the compounds detected in blood and urine and, in addition, revealed the presence of Tropicamide. Results of toxicology analyses conducted in a special laboratory of the armed forces are not included.

The German laboratory test results for Alexei Navalny, published by a group of doctors at the Charité – Universitätsmedizin Berlin in December 2020 (Quelle Anhang: <https://drive.google.com/>, The Lancet 2020)

specific compounds were detected in the Day-4 hair sample testing he directed. Eckardt refused to answer, or to provide what OPCW called last week “a credible explanation”.

Last December, Eckardt, co-author David Leindl, and twelve other German doctors signed a clinical report on the Navalny case, which was published by The Lancet. Read the report here [3].

Left: report publication source [4]. Right, Dr Kai-Uwe Eckardt, identified publicly and thanked by Navalny as head of the team treating him. According to the published paper, Eckardt and Leindl “wrote the first draft of the report, coordinated internal revision, and prepared the submitted version...[They] had unlimited access to all clinical data and reports.” These reports, according to Eckardt and Leindl, included reports from the German Bundeswehr Institute of Pharmacology and Toxicology in Munich “who did repetitive measurements of...cholinesterase status and gave toxicological advice”.

Attached to the Navalny case report was what Eckardt and Leindl called a “Supplementary Appendix”. This comprises four separate clinical data summaries. Read them all here [5].

Appendix S2 says it reports the results of testing of Navalny’s blood and urine samples “on the arrival of the patient at Charité – Universitätsmedizin Berlin (day 3). Day 3 was August 22, 2020. For telltale analysis of each of the compounds identified, read this [6]. For an independent medico-psychiatric diagnosis of the pattern of drug- taking revealed, Read here [7].

The British government toxicologist requested to review this and the three other appendices commented: “[this is] an interesting cocktail and as far as I can see, most drugs administered to him (perhaps under guidance from medics experienced at treating OP [organophosphate] poisoning elsewhere in the world). Fentanyl [was] certainly given in air ambulance – not sure about sufentanil although it’s mentioned in the Lancet paper and was probably also given in the ambulance. It is interesting that a lot of propofol and midazolam was administered but neither reported (detected). How good is the [Berlin] tox testing? Would be interesting

to see the hair test as this will reflect only drugs given up to 6 days and more earlier in Russia.”

“[I am] surprised about lack of atropine in blood – Russians must have stopped it or testing insensitive. Barbiturates & rocuronium consistent with intubation and forced ventilation but odd that no barbs in urine while blood positive. Also odd that rocuronium negative in blood (when used in UK you find it for weeks afterwards, so again I wonder about quality of [the Berlin] tox?).”

The scientific research literature reveals that lithium concentrations can be measured in hair samples from six to twelve months before the hair is tested [8]. Hair sampling is also a standard procedure used by police for evidence of illegal purchase and consumption of benzodiazepines. “Hair has been identified as a good analytical specimen and probative evidence for chronic drug use. Results obtained from the analysis of hair specimens provide sufficient evidence of previous drug usage as well as information on the duration for which the drug was used, depending on the growth rate of hair (approximately 1 cm/month), and thus can serve as key evidence in legal decisions.” [9]

Of the benzodiazepine drugs recorded in Navalny’s body in Berlin, temazepam (brand name Restoril) is relatively short-lasting; diazepam (Valium), nordiazepam (CalmDay) and oxazepam (Serax) will be found in hair testing for up to 90 days [10]. Concentrations of these drugs are still measurable in hair samples after 10 months [11].

An independent British toxicologist who specializes in the organophosphates found in fertilizers and chemical weapons commented that “anything found in the hair sample must be 21 days [since ingestion] or even further back in time.” That means 21 days before August 24, 2020 – August 3, 2020.

It was midsummer in Russia at the time, and Navalny has advertised daily publicity photographs of himself in brimming health, secure and unthreatened. On Sunday, August 2, 2020, Navalny was at a distance running event in Moscow. On Monday, August 3, 2020, and Tuesday, August 4, he published an Instagram of

Sources:

[1] OPCW Organisation for the Prohibition of Chemical Weapons, EC-98 Agenda 6g statement “Addressing the threat from Chemical Weapons Use”, on October 5, 2021: <https://www.opcw.org/sites/default/files/documents/2021/10/EC-98%20item%206g%20Statement.pdf>

[2] The Ministry of Foreign Affairs of the Russian Federation, „Briefing by Foreign Ministry Spokeswoman Maria Zakharova, Moscow”, on October 7, 2021: https://www.mid.ru/en/foreign_policy/news/-/asset_publisher/ckNonk/E0zBw/content/id/4882600

[3] The Lancet magazine, David Steindl and others, „Novichok nerve agent poisoning”, on January 16, 2021: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)32644-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32644-1/fulltext)

[4] The Lancet magazine, David Steindl and others, „Novichok nerve agent poisoning”, on January 16, 2021: [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(20\)32644-1.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)32644-1.pdf)

[5] The Lancet magazine (Google Drive), David Steindl and others, “Supplementary Appendix”, on 12/22/2020: <https://drive.google.com/file/d/1zYD6nPDhmpu5u6r-BReHal-wVLiXzoh/view>

[6] Dances With Bears magazine, John Helmer, „Berlin clinical data confirm Alexei Navalny had pancreatitis....- no Novichok-symptoms”, on 1/12/2021: <http://johnhelmer.net/berlin-clinical-data-confirm-alexei-navalny-had-pancreatitis-diabetes-liver-failure-staphylococcal-infection-mild-heart-attack-no-novichok-symptoms/>

[7] Dances With Bears magazine, John Helmer, „ALEXEI NAVALNY CRASHES OUT – WHAT HAPPENED WHEN HE WASN’T ON LITHIUM AND BENZODIAZEPINES”, on 2/9/2021: <http://johnhelmer.net/alexei-navalny-crashes-out-what-happened-when-he-wasnt-on-lithium-and-benzodiazepines/>

[8] Walsh Medical Media, Kazi et al, „Pharmaceutica Analytica Acta”, on November 18, 2016: <https://www.walshmedicalmedia.com/open-access/variation-of-lithium-contents-in-scalp-hair-samples-of-different-male-psychiatric-patients-before-and-after-treatment-with-itspha-2153-2435-1000520.pdf>

[9] [Publiziert auf Free21 am 17.03.2022, 6:00 Uhr](https://watermark.silverchair.com/35-5-312.pdf?token=AQECaHi208BE490oan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485yGAAAsQwggLABgkqhkiG9w0BBwagggKxMIICrQIBADCCAAQYGC5qGSib3DQEHATAeBgIghkgBZQMEAS4wEQQMxdMCAcbfWPocrG3AgEQGIIcXkSwct8ekG4oNE6-jdiT9xIdtmshXgg26ocaHUP2r1qw500uNo91qRU0ASbGwNvowGb5xDKBDOEKuFRxfAkPjibv3yPZ-BjEVP8j0q5_kLU8s4gQvYJpTnXVcFrlai1LnQeqh6-zu1wugSVfQSPOMh7YbJfXMM7ecofM3Hi044jPh-b07ugEbLkWoIahctX72QcZEBE1j7rEBKl90ah1-vMB-u55UaqWDP7u-aWw0783tb_ddQnkyZBXBqU-JWMWmycSe_SePF-Tlvv775H_QvNQ7pRkQpcsp868SsvEiqHlrs5GTThSynQH7pGjc1q28bDdp_o-KAm9JLtoALkw-loz1LVD9GEVbylb-Ko0m9TpnG14NLN1mLkLbOkx5UfgQKFI6f0-jjVYBeksXyWmi7n51zIwz-4cd-FamemazN-54qSSv6T8LuqZt0hEYRvUlh5qxmP2Dn0jy3z-6aP5osNss1Uais4wvlgxvqUOEENjNYACLGOHxq0-rPtXyohcWV_BDjn9_xGHotr5uPM5pKzXGX6bivtbqgbzqkqS9ZvEShoendQEim25lJVA-zTl6q4bgPhvh2-nYtKc7-hC1sCU73TuxBTH1llo4EGCfrk-9wJ5pg-KDGFz2aadcP66rG0wBoqsQQ6P03FqXRHDFdNkn-mgSbxK97LGCC_xjxiAITSHFb2V6bavkosumZQkU-uloL99fpp6AjxVhCpnoK88nyd35AZWHw9uapOnKhUmlrM8WjUnj57oip6mgizxUj4G9c_8VTDpCz-26QVcShPhoYmXhxy_xWLKCWtr_LD8faQ-goTHWovXrs</p>
</div>
<div data-bbox=)

Sources:

- [10] THE RECOVERY VILLAGE DRUG & ALCOHOL REHAB, Erica Weiman, „How Long Do Benzos Stay in Your System?“, updated on 10/18/21: <<https://www.therecoveryvillage.com/benzodiazepine-addiction/faq/how-long-do-benzos-stay-in-system/>>
- [11] Researchgate online social network and database, Xin Wang and 6 others, „Deposition of diazepam and its metabolites in hair following a single dose of diazepam“, in January 2017: <https://www.researchgate.net/publication/306268257_Deposition_of_diazepam_and_its_metabolites_in_hair_following_a_single_dose_of_diazepam>
- [12] Wikipedia free encyclopedia, „Tropicamide“: <<https://en.wikipedia.org/wiki/Tropicamide>>
- [13] BBC news magazine, „Putin critic Navalny has eye surgery in Spain after attack“, on 9 May 2017: <<https://www.bbc.com/news/world-europe-39862598>>
- [14] ScienceDirect online scientific database, Francesco Saverio Bersani M.D. and others, „Drops of madness? Recreational misuse of tropicamide collyrium; early warning alerts from Russia and Italy“, in September–October 2013: <<https://www.sciencedirect.com/science/article/abs/pii/S0163834313001345?via%3Dihub>>
- [15] Independent magazine, Shaun Walker, „Krokodil: The drug that eats junkies“, am 22.6.2001: <<https://www.independent.co.uk/news/world/europe/krokodil-the-drug-that-eats-junkies-2300787.html>>
- [16] ARVO Journals and Publications, Julian Tokarev; Elena Bitrian; Richard Manka, „Effects of tropicamide and phenylephrine on iris dilation and blood pressure in adults with and without hypertension“, in June 2013: <<https://iovs.arvojournals.org/article.aspx?articleid=2151708>>
- [17] Wiley Online Library, Francesco Saverio Bersani and others, „Injecting eye-drops: a mini-review on the non-clinical use of tropicamide“, on July, 18 2015: <<https://onlinelibrary.wiley.com/doi/10.1002/hup.2481>>
- [18] NCBI U.S. National Library of Medicine, Erin D. Broderick; Heidi Metheny; Brianna Crosby, „Anticholinergic Toxicity“, Last Update: November 14, 2021. <<https://www.ncbi.nlm.nih.gov/books/NBK534798/>>
- [19] Dances With Bears magazine, John Helmer, „BRAIN POISONING BY RUSSIAN NERVE AGENT – ALEXEI NAVALNY INFECTS GERMAN CHANCELLERY“, on 9/6/2020: <<http://johnhelmer.net/brain-poisoning-by-russian-nerve-agent-alexei-navalny-infests-german-chancellery/>>
- [20] Dances With Bears magazine, John Helmer, „BERLIN DOCTORS’ REPORT ON NAVALNY CASE REVEALS NEW EVIDENCE, RAISES NEW QUESTIONS“, on 12/23/2020 <<http://johnhelmer.net/berlin-doctors-report-on-navalny-case-reveals-new-evidence-raises-new-questions/>>
- [21] Society of Toxicology (SOT), newsletter, „Clinical and Translational Toxicology“, in spring 2015: <https://www.toxicology.org/groups/ss/ctss/docs/CTSS_NL_Spring2015.pdf>
- [22] Future-Forces-Forum Platform, Prof. Dr. Horst Thiermann, „New developments for diagnosis and treatment of nerve agent poisoning“, in 2020: <http://future-forces-forum.org/delegation/people/68_thiermann?lang=en>
- [23] Military Medicine Worldwide publisher, Prof. Dr. Horst Thiermann, „bedside diagnostic and biomedical verification of exposure to chemical warfare agents“ („„Krankenbettdiagnostik und biomedizinischer Nachweis der Exposition gegenüber chemischen Kampfstoffen“), im November 2018: <<https://military-medicine.com/media/landing-page/5/attachment-1540646082.pdf>>

himself in his office. On Wednesday, August 5, he was at his dacha outside the city. On Friday, August 7, he was waterboarding on a Moscow region river.

The hair sample testing reported in Berlin on August 23, 2020, revealed the drugs which Navalny was consuming on the days of the published photographs. These hair test results have been withheld by the Charité hospital doctors, although Eckardt and Leindl acknowledge knowing what they were.

“The German doctors say ‘several’ of the blood and urine-detected drugs were also found in Navalny’s hair,” the non-government British expert said last week. “I don’t see any logical reason in giving a comprehensive blood and urine report, and not do the same with hair. Without seeing the actual hair analysis report, we are guessing which specific drugs and compounds were common to blood/urine and hair.” What is medically certain, however, according to the British toxicologist, is that “the hair ones are all pre-attack compounds.”

“Alcohol use/abuse is perhaps the most common type of hair test,” according to this source. “You can keep off the booze for a day or two, but the hair does not lie. Ethyl glucuronide is the ethanol metabolite which is present in hair. Again, four weeks and older is the history [in the hair test]”.

The Eckardt-Leindl report in The Lancet describes in detail many types of tests for Navalny, including “toxicological analysis and drug screening in blood and urine samples obtained on admission”; “cranial CT and MRI scans”; “analysis of cerebrospinal fluid”; “skin swabs obtained on admission”; “laboratory analyses [of blood] plasma”; and the “hair sample obtained on day 4”.

The only test results not precisely identified by Eckardt and Leindl from this list were from the hair sample test. Instead, they noted the “presence of several of the compounds detected in blood and urine” – without identifying what they were. “In addition,” Eckardt and Leindl claim, their hair testing “revealed the presence of Tropicamide.”

The British experts query why Eckardt and Leindl specified tropicamide but omitted the other compounds. Tropicamide

[12] is an atropine-type drug typically used in the form of drops for eye treatment. Navalny has required eye treatment since 2017, when he was attacked [13]. On the other hand, in Russia and Italy, according to published medical research, tropicamide is used intravenously to achieve highs in combination with alcohol and opiates [14]. When tropicamide is combined in overdose, the “medical effects of tropicamide misuse include slurred speech, persistent mydriasis [dilation of the eye pupil], unconsciousness/unresponsiveness, hallucinations, kidney pain, dysphoria, ‘open eye dreams’, hyperthermia, tremors, suicidal feelings, convulsions, psychomotor agitation, tachycardia and headache.” In 2017, this report on drug abuse in Russia noted that tropicamide was the “latest street drug” [15].

An internationally recognized European eye surgeon comments that tropicamide is a fast-acting topical application whose effect to relax the eye muscles and dilate the pupils disappears within two hours. He believes the drug does not enter the body’s biochemical system, so it would not register on blood or hair tests. Testing of biomedical system responses to tropicamide drops in the eye, such as heart rate and blood pressure, shows no effect [16]. Once Eckardt and Leindl discovered the tropicamide in Navalny’s hair sample test, they recognised that Navalny had taken the drug for a non-medical purpose.

According to this review of the medical research on tropicamide abuse, “acute tropicamide intoxications can lead to anticholinergic syndrome, hyperthermia, tremors and convulsions. Chronic tropicamide-related problems include cardiovascular toxicity, psychosis, renal or liver failures, severe weight loss and infections.” [17] For the layman, the commonest cause of “anticholinergic syndrome” is poisoning from drug overdoses [18].

Reporting on Navalny, the Berlin doctors led by Eckardt and Leindl said that “based on clinical and laboratory findings, severe cholinesterase inhibition was diagnosed.” But Eckardt and Leindl also say they did not measure this themselves at their Berlin hospital. Nor do they claim to have found Novichok in any of the Navalny samples they tested.



Alexei Navalny, Russian opposition leader, at Central Election Commission's session which is about to deny his right to be in the ballot on the upcoming presidential elections, December 25, 2017
(Foto: Evgeny Feldman, wikimedia.org, CC-BY-SA-4.0)

Instead, they report that it was the "Bundeswehr [German Army] Institute of Pharmacology and Toxicology (IPTB) in Munich, Germany, who did repetitive measurements of butyrylcholinesterase, acetylcholinesterase in red blood cells, and cholinesterase status and gave toxicological advice." For more on this military unit and its role in the Navalny Novichok operation, read this [19] and this [20].

The principal medical doctor responsible for the IPTB testing in Munich was Horst Thiermann. He claims to have detected nerve agent poisoning in Syria, Iraq, Japan [21] and Malaysia [22]. In November 2018 Thiermann gave a speech to a trade fair in Dusseldorf selling medical technology to NATO and other armies; Thiermann's speech was entitled "bedside diagnostic and biomedical verification of exposure to chemical warfare agents" [23].

Next month, on November 15, 2021, Thiermann will appear again at the same Dusseldorf trade fair, selling his advice on "therapy & verification of poisoning

by organo-phosphorus compounds". [24] This will be Thiermann's first public appearance since his role in authorizing the Novichok allegation was revealed by Eckardt and Leindl in The Lancet.

For attendance at Thiermann's presentation on November 15 for journalists and "interested parties", fill in this application to the organisers, Medica Dusseldorf [25].

The British government toxicologist and the British organophosphorus expert have called into question why Eckardt and the Charité hospital in Berlin failed to test and measure Navalny's cholinesterase indicators, and why they relied instead on Thiermann and the German Army. Said the second of these sources: "The Berlin hospital relying on the Army or any outside lab to perform the Acetylcholine esterase [AChE] assay makes no sense at all. Berlin seemed to have no issues in measuring Butyrylcholine esterase, but not the more relevant AChE. Take the example of a German farmer accidentally poisoning himself with OP [organophosphorus] pesticide. Would the Berlin hospital really have to rely on the Army? The AChE assay is simple, straightforward. AChE is the most critical assay, yet it was 'sent out' to an Army lab. What was the reason?"

Eckardt and Leindl were contacted by email at their Charité hospital office, and asked to clarify the medical evidence which they have published in The Lancet under their names.

Eckardt and Leindl have not replied. They refuse to respond to the evidence analysis provided by the British experts.

After this report was published, Eckardt and Leindl were asked to read it and to respond to the medical evidence casting "doubt on the veracity of the case report you signed". Noting Novichok in the headline of their Navalny case report and tropicamide in Appendix S2, Eckardt and Leindl were asked "whether you believe withholding clinical results of Mr Navalny's hair tests in the context of your Lancet case report is professionally appropriate."

Eckardt and Leindl refuse to answer.

Sources:

[24] Messe Düsseldorf Event organizer, Prof. Dr. Horst Thiermann, "Therapy & verification of poisoning by organo-phosphorus compounds", on 11/15/2021:

<<https://events.medica.de/en/event/dimimed-therapy-verification-of-poisoning-by-organo-phosphorus-compounds>>

[25] Messe Düsseldorf Event organizer, contact form:

<https://www.medica-tradefair.com/en/Contact,_Traveling_Hotels/Contact>