BAYSIDE FAMILY MEDICAL & MUSCULOSKELETAL PRACTICE



17/7/2023

Maria Silvestri
SA Health
Claims & Rehabilitation Consultant

Re Mr Muris Boric DOB 11/11/1985

Dear Maria

I am writing in support of Mr Muris Boric and his claim regarding a vaccine injury.

Muris is a 37-year-old man who consulted me for the first time in early June 2023. He stated that he had been injured as the result of having received an mRNA based Covid-19 injection (Moderna) on the 1st of November 2021 as he was required to do under the directions given to all SA Health employees, in order for Muris to retain his employment. Prior to this time Muris was active with no medical illnesses and was able to cycle 20 kilometres 3-4 times per week without issue. Subsequent to his injection, Muris developed chest pains worsened by exertion and fatigue/shortness of breath with limited exercise tolerance.

Muris reported his symptoms to the TGA on the 7th of November 2021 and filed a claim under RTWSA on the following day. On the 17th of January 2022, he presented to the emergency department via ambulance with worsening chest pains. He was diagnosed by the treating doctor with "Post Vaccine Pericarditis". At the time his ECG showed PR depression which although a non-specific finding is associated with pericarditis/myopericarditisⁱ.

"The most common ECG abnormality in myocarditis is sinus tachycardia associated with nonspecific ST/T-wave changes. The presence of PR segment depression both in precordial and limb leads, a PR segment depression in leads with ST segment elevation, a PR segment elevation in aVR lead or a ST elevation with pericarditis pattern favour generally diagnosis of perimyocarditis".

The distinction being that myocarditis involves injury to cardiac muscle as well as inflammation of the surrounding connective tissues (pericardium). Pericarditis is largely diagnosed on the basis of symptoms. Myopericarditis is often (but not always) associated with abnormalities of cardiac function and/or investigations. The diagnosis is important because it has prognostic implications. Myocarditis can be the cause of sudden cardiac death.

His blood test showed an elevated d-dimer which was investigated with a CTPA which returned a negative result. I would attribute the d-dimer result to the presence of "micro-thrombi" a well described adverse consequence of the mRNA Covid-19 vaccinesⁱⁱ.

He has informed me that since this time he has been experiencing chest pains and a reduced exercise capacity along with general lethargy and fatigue. This he reports has been worse since being infected with Covid-19 in January this year. His current symptoms are consistent with a Covid-19 mRNA injection induced myo-pericarditis. This has been caused by damage from the Covid-19 "spike protein" and associated inflammation which has likely been exacerbated by a Covid-19 viral infection. Muris is motivated to return to his former duties but his ongoing symptoms are a concern for him. His symptoms are exacerbated when he exerts himself and hence, he is reluctant to exercise to a level that precipitates these symptoms (chest pain).

I note that Muris was reviewed at various times during the course of his illness, by a number of health practitioners who have provided opinions regarding the nature of Muris's condition. It would appear to be the opinion of various cardiologists that Muris has either recovered from his injury or that he never really had pericarditis/myocarditis. He has been told that it is a psychological issue not a medical one. These opinions also reflect a great reluctance to attribute any of Muris's symptoms to a vaccine injury or are dismissive of any significance or consequence of a diagnosis of vaccine injury. Additionally, there appears to be a complete disregard for the efficacy of any treatments that Muris feels have been beneficial and any benefits have been attributed to a "placebo" effect.

With respect, the testimony/opinions provided by various medical professionals in regard to Muris's condition, with the exception of Dr Mona Kaur, are based on conjecture and assumptions. These professionals do not have any experience in managing those with post vaccination injuries (as one cardiologist was prepared to admit).

There also seems to be a lack of reporting and interpretation of any physical examination findings conducted in association with formation of these opinions. I note that Muris has a persistently elevated heart rate around 100 beats per minute which would be very unusual for a fit 37-year-old. I would expect a 37-year-old who cycles 80 km per week to have a resting heart rate of around 60 beats per minute. I am surprised that there does not seem to be any concern about an increased resting heart rate in someone who potentially has pericarditis/myocarditis, given that in a study of children in Thailand, found that many of those with a suspected myopericarditis following Covid-19 injection, showed nothing more than a persistent tachycardia.

Such lack of understanding of Covid-19 injection injuries amongst medical professionals is not surprising. There is ample data in the literature describing the types of injuries that have occurred as the result of these injections but much of this data is comes from overseas. A renown cardiologist Dr Aseem Malhotra has published on vaccine injuries. His analysis of the literature and his own personal experience in treating cardiac injuries from the vaccine leads him to conclude that myocarditis is the most common mRNA Covid-19 vaccine induced injury and that young males are the most susceptible to this type of injuryⁱⁱⁱ.

This is reflected in the TGA data as available via the DAEN data base iv. According to the most recent update from 68 million doses of Covid injections there were approximately 139,000 injuries reported (1 per 500 doses) with approximately 16,500 reporting cardiac injuries (12%). Of the 994 deaths reported in this time frame approximately 300 (30%) had a suspected cardiac cause with myocarditis, pericarditis and myopericarditis listed as contributing to a significant portion of deaths, one third in those aged under 65 years old and arrythmias/cardiac arrest account for another significant proportion (1/3) of these cardiac deaths.

There are also a number of common misconceptions in regard to Covid-19 injections and injuries which require correction.

1. Although Pfizer is the more talked about injection to cause peri/myocarditis, all Covid-19 injections have the potential to cause harm to cardiac tissue.

Each of the Covid-19 injections were listed as the suspected medication in the 16,500 reported cardiac injuries^v. Information published on our own government website suggests the Moderna may be more likely to cause injury^{vi}.

"Data from Canada, Israel, Australia, the United Kingdom, the United States and some European countries suggest that the incidence of myocarditis and pericarditis associated with Moderna vaccines is higher than with Pfizer vaccines. The severity of cases does not appear to differ".

2. Injuries can occur after a single Covid-19 injection.

There is a case report of a post vaccination myocarditis death in an adult post a single Moderna injection^{vii} and a study which found a significant proportion of injuries after the first injection (40.5%) and after a single Moderna injection (32%)^{viii}.

3. Most cases of post vaccine pericarditis/myocarditis are mild and resolve spontaneously.

This may be true for those with mild injury who are unlikely to seek medical attention or treatment however, given the number of reports to the TGA it would seem that there are a significant portion of injuries which are more severe and do not resolve spontaneously. One study found post Covid-19 injection injury that 19% had not recovered by 90 days^{ix}.

There also appears to be a reliance by health professionals on the absence of any significant abnormalities being detected on the "usual" cardiac investigations, as sufficient to exclude a diagnosis of myocarditis. This reliance is unfortunately widespread and common place.

I note Muris' MRI was negative for myocarditis on the basic of no evidence of myocardial oedema or dysfunction. It should be noted that MRI only has a sensitivity of 89% in detecting myocardial oedema^x and so could be normal in 11% of cases. With respect to the specific utility of MRI in identifying vaccine injuries, the largest MRI case series of myocarditis following COVID-19 vaccination included 15 patients, almost all of whom had been hospitalized^{xi}, reflecting the more severe end of the spectrum of vaccine-associated myocardial changes. The diagnosis of myocarditis therefore cannot be excluded on the basis of an MRI.

With respect to the "normal" Echo result, these scans both showed abnormalities that appear to have been overlooked. These Echo's were performed trans thoracically (TTE) and the technical quality of the images on the latter scan were noted to be "fair" only, thus questioning the sensitivity of such a study and hence the accuracy of the result. Despite less that optimal imaging there were abnormalities noted which appear to have been dismissed. The scans both showed that Muris had mild mitral valve regurgitation and the report clearly states this. Mitral regurgitation can occur consequentially to myocarditis. Muris should have been advised and followed up from a cardiac perspective irrespective of the cause of his mitral disease. There was also comment on the second Echo about some "separation of the pericardial space" which could have indicated a small effusion.

Lastly and most importantly there is an apparent complete lack of understanding about the pathophysiology of Covid-19 injection injuries and hence a lack of understanding with respect to outcomes and any potential treatments. Covid-19 injection induced peri/myocarditis does not result from the same pathological mechanisms as other forms of pericarditis/myocarditis. There is limited information about the structural or histopathological changes associated with it and the mechanism by which it comes about is largely unknown but likely due to "spike protein" damage^{xii}.

Results of autopsies performed on 2 adolescent boys provides some important information. These boys died a short time after receiving a second Pfizer Covid-19 injection. One boy developed a brief febrile illness which resolved in a few days. The other boy was completely asymptomatic up till his death. Both boys died in their sleep $^{\rm xiii}$.

The pathological changes noted in the boys' hearts are different to any that have previously been described. Although one boy had cardiomegaly, the other had a macroscopically normal heart. The changes described involved the entire heart with inflammation surrounding the blood vessels and a varying degree of damage between different sections of the heart muscle and pericardium.

The Authors' interpretation is that the myocardial injury pattern is similar to what is seen in the myocardium of patients who are clinically diagnosed with Takotsubo, toxic, or stress cardiomyopathy, which is usually a temporary injury that can develop in patients with extreme physical, chemical, or sometimes emotional stressors. They also suggest that the acute cardiac changes seen in these 2 boys are the result of epinephrine-mediated effects on cardiomyocytes. Stress cardiomyopathy is a catecholamine-mediated ischemic process seen in high catecholamine states in the absence of coronary artery disease or spasm. Hence there would not be any evidence of vascular disease on a CT coronary angiogram.

The authors suggest this "post-vaccine" reaction may represent an overly exuberant immune response, with the myocardial injury mediated by similar immune mechanisms to those described with SARS-CoV-2 and multisystem inflammatory syndrome cytokine storm. The cause of the accompanying fibrotic changes in the heart of the first boy (macroscopically normal heart), was unclear. They state that "it is conceivable that this process first started with the first vaccination dose and the initial myocardial effects resolved and healed over time. The second dose may have restarted the process". They also state "these instances are different from typical myocarditis and that cytokine storm has a known feedback loop with catecholamines".

What is concerning about these autopsy findings is that the degree of microscopic injury does not correlate with macroscopic findings hence investigations such as an ECHO or an MRI would not necessarily detect a significant injury that could lead to arrythmia and death.

Myocarditis is an important cause of sudden cardiac death in young adults, accounting for up to 12% of sudden cardiac death cases, according to postmortem analysis^{xiv}. Due to increased risk of sudden cardiac death, particularly when performing exercise, avoidance of competitive sports is typically recommended for at least 3 months in patients with acute myocarditis^{xv}.

With respect to the treatment of "spike protein damage", one review of the available literature showed numerous potential treatments based on their mechanism of action against "spike protein" and inflammation^{xvi}. An international body has published a suggested protocol^{xvii}. These treatments involve a combination of supplements and some repurposed prescription medications which have protease activity against the spike protein as well as supporting the immune system to help clear it from the body and manage any inflammation.

Muris stated that his symptoms responded to anti-inflammatories but he was still only able to function at reduced capacity and that his symptoms seem to relapse or worsen when he did not take his anti-inflammatories.

He described on going exertional symptoms which worsened post becoming infected with Covid. Subsequent to his infection Muris consulted with a naturopath who prescribed various "natural" remedies and he reports some improvement in all his symptoms but states he is not yet restored to his former capacity. Muris feels that his symptoms are responsive to these natural remedies and so I would advise that he continue to take them on a regular basis until he is symptom free.

I believe that Muris's symptoms are consistent with a myopericarditis caused by his Moderna Covid-19 injection. The condition is not excluded by "normal" conventional cardiac investigations. The condition has likely been worsened by Muris having been infected with the Covid-19 virus which has further induced the production of inflammatory cytokines. Given the potential seriousness of this condition and the potential for an adverse outcome, I would consider Muris' concerns regarding over

exerting himself appear to be well founded. I would caution any dismissal of his symptoms as "psychological" .

I would advise that Muris be allowed to adjust his level of physical activity according to his symptoms. The lack of data regarding long term prognosis and potential consequences of a super imposed Covid-19 infection make it difficult to set a time frame for Muris's recovery.

I would also advise further cardiac assessment and follow up in regard to his "Mitral Regurgitation" and a review of the initial TTE report/result. This finding may be consequential to his vaccine injury.

I would also recommend that Muris continue to take his supplements as directed by his alternate medical practitioner as these seem to be the only treatments having any benefit for his condition.

Yours Sincerely

Dr Maureen Busuttil [MBBS, FACEM, PhD]

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