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10 March 2023

PRIVATE AND CONFIDENTIAL

Report prepared by Dr Richard Newman
Consultant General Physician

SA HEALTH
PO Box 287
RUNDLE MALL SA 5000

Attention: Ms Maria Silvestri

Dear Madam

Re:	**Muris BORIC**
Date of Birth:	**11/11/1985, aged 37 years.**
Address:	**5 Welsh Crescent** **PARA HILLS SA 5096**
Occupation:	**Communications Engineer**
Employer:	**Department of Health & Wellbeing**
Date of Injury:	**1 November 2021**
Your Reference:	**22000032/01**
Date of Assessment:	**3 March 2023**

Thank you for referring Mr Muris Boric for medical assessment and report. Based on Mr Boric's medical condition as specified in your referral, I confirm that my specialty is appropriate for the conduct of this assessment.

Having reviewed the available records and file data, interviewed and examined Mr Boric, I now submit a detailed medical report in answer to your request.

I obtained the following information from my interview with Mr Boric (unless otherwise specified).

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MedHealth Pty Limited
ABN 32 141 219 785

Statement of Qualifications/Expertise:

Special Expertise	• General Medicine • Intensive Care Medicine • Diabetes • Parkinsonism • Hypertension • Polymyalgia Rheumatica • Thyroid Disorders • Parathyroid Disorders
Qualifications & Professional Associations	• Bachelor of Medicine, Bachelor of Surgery, University of Adelaide • Fellow & Member, Royal Australian College of Physicians (RACPS) • Fellow (past), Intensive Care Medicine, College of Intensive Care Medicine of Australia and New Zealand (FCICM) • Member, Australian Medical Association
Professional Status & Accreditations	• Consultant General Physician, Private Practice, South Australia • mlcoa Consultant General Physician

I am a qualified and experienced Consultant General Physician with expertise in diagnosis and management of complex and multiple medical disorders, including conditions such as diabetes, parkinsonism, hypertension, polymyalgia rheumatica, and thyroid and parathyroid disorders.

After completing medical training, I undertook advanced fellowship training in general medicine to qualify as a Consultant General Physician and further specialising in intensive care medicine. I was appointed to senior clinical positions including as a Consultant in ICU across different States in Australia and Director of Critical Care Services at Calvary Hospital. I served as a Medical Officer with the Royal Australian Air Force and undertook overseas postings in this role. With over 25 years' experience in internal medicine in permanent and locum positions across Australia, and now five years in private practice, I consult in South Australia at a number of practice locations.

I have supported the ongoing training and education of fellow medical and nursing clinicians including involvement in the Clinical Examination training for intensive care and the Royal Australasian College of Physicians. I have been a key contributor to clinical trial databases and maintain my professional development through regular attendance at conferences and workshops, as well as having participated in intensive care mortality and morbidity audit forums at the Royal Adelaide Hospital and the medical indemnifier MIGA Risk Reduction meetings.

FILE MATERIAL AVAILABLE:

- Letter of Instruction:
  - SA Health - 27 February 2023.

- Enclosure as listed - D Mon YYYY

  - Dr Manmohan Kaur Medical Certificate - 10 November 2021.
  - Dr Manmohan Kaur letter - 22 November 2021.
  - Dr Manmohan Kaur Medical Certificate - 6 December 2021.
  - Dr Manmohan Kaur Work Capacity Certificate - 14 January 2022.
  - Northern Adelaide Local Health Network Medical Certificate - 17 January 2022.
  - Claim form - 18 January 2022.
  - Chief Public Health Officer COVID-19 exemption letter - 28 Jan 2022.
  - Mr Boric email - 9 February 2022.
  - Lyell McEwin Hospital Notes from admission - 17 January 2022.
  - Dr Manmohan Kaur Work Capacity Certificate - 28 February 2022.
  - Dr Manmohan Kaur report and attachments - 6 May 2022.
  - Dr Sujith T Chacko report and attachments - 11 May 2022.
  - Dr Manmohan Kaur Work Capacity Certificate - 23 May 2022.
  - Dr Sujith T Chacko letter - 8 June 2022.
  - Dr Leo J Mahar report - 29 June 2022.
  - Dr Manmohan Kaur Work Capacity Certificate - 26 August 2022.
  - Return to Work Consultant Case Conference Summary - 1 September 2022.
  - Mr Jack Elsworthy Exercise Physiology Management Plan - 26 September 2022.
  - Dr Manmohan Kaur Work Capacity Certificate - 1 February 2023.
  - Mr Jack Murphy email - 9 February 2023.
  - I-Recover Post Vaccine Treatment by FLCCC Alliance – February 2023.

HISTORY:

Occupation/Work Duties:

Thank you for your request for an assessment of Mr Boric who is a 37-year-old recently married man who originates from Bosnia and now works in IT in the Department of Health and Wellbeing. His work involves some sedentary periods but also a fair degree of mobility walking from site to site and occasionally lifting objects of up to 8 kg or 10 kg in weight. Mr Boric did not admit to any significant past medical history and no regular prescribed medications prior to 11 January 2022. He had by his account been physically very fit, cycling up to 20 km a day before the injury as described.

Mechanism of Alleged Injury/Sequence of Events:

Within hours of receiving his Moderna COVID-19 vaccine on 11th January 2022 he began to experience some sharp pain in the left submammary region. It was concerning but only intermittent and was aggravated by any attempt to lift a significant object.

This chest pain continued to wax and wane and he eventually presented to the Lyell McEwin Hospital Department of Emergency Medicine on 17 January 2022. It was noted at that time that he was mildly tachycardic and an ECG (not available for my review) was described as being "consistent with pericarditis" which to my understanding would include diffuse ST changes in all leads. Initial bloods were normal apart from an elevated D-dimer at 0.88 which led on to a CT pulmonary angiogram that excluded a significant pulmonary embolus. His chest X-ray was clear.

The assessment offered at the time was that this chest pain was likely a bout of pericarditis in response to an exaggerated immune response. It was suggested to Mr Boric that his convalescence "may take some time".

In the months that followed Mr Boric sought the opinion of a cardiologist Dr Chacko who arranged for a cardiac perfusion MRI on 9 March last year and this study was entirely normal. Bloods that followed on in May and December were normal apart from a slight drop in neutrophil count in the December blood which was reasonably attributed to some colchicine he had been prescribed for the pericarditis. Mr Boric did not notice any improvement on the colchicine.

Repeat bloods in January of this year were normal including a D-dimer. Mr Boric sought the opinion of a naturopath and the views of people with similar symptoms on Facebook pages and was led to trying various supplements including several intravenous doses of vitamin C.

A second cardiological opinion led to the suggestion that he should source Ivermectin from overseas to assist with his symptoms. He had been taking low-dose aspirin and also what he referred to as a variety of "natural blood thinners".

During this period he has lost around 5 kg of weight and is now running at 80 kg. He was working for a time remotely during the COVID period and there were times in which his chest discomfort seemed to have improved which he attributed to a variety of different naturopathic substances and vitamins. A list of the alternative therapies Mr Boric has been purchasing and using was provided for me in the request for assessment.

Mr Boric found that he is limited in what he can do in his activities of daily living and that walking for several minutes will often cause an exacerbation of the left-sided burning, (intermittently sharp) submammary chest discomfort. He does notice that in palpating the region it is occasionally tender but the pain does not radiate any further and specifically not down his left arm, into his neck or jaw or through to his back. Some postures seem to aggravate the situation namely sitting upright or leaning forward which would be less consistent with the diagnosis of pericarditis.

Mr Boric is frustrated by his inability to resume his previous levels of physical activity and is very reticent to consider scaling back or phasing out his natural therapies and other medications for fear of experiencing an exacerbation of his symptoms.

Mr Boric was good enough to provide me with several documents including a timeline of his recent symptoms prior to and after the vaccination as well as internet derived opinion on the subject.

PHYSICAL EXAMINATION:

On examination he was a fit looking man of normal physique who tended to walk with a slightly protective posture on the left-hand side. His heart rate was around 100 bpm and on careful auscultation of his heart I was unable to hear a pericardial rub or murmur. His chest was clear. There was no specific tenderness in the precordial area.

SUMMARY AND ASSESSMENT:

To answer your specific questions:

1. The history provided by Mr Boric as to his condition.

The history was as described in the opening page to this assessment.

2. Your diagnosis of all injuries/conditions.

The diagnosis was one of probable and mild post-Moderna COVID-19 vaccine pericarditis.

3. What are the worker's current symptoms and complaints and the intensity / severity of presenting symptoms with regards to his injuries?

The symptoms are intermittent with periods of relative freedom from the pain with exacerbations associated with attempts to increase his aerobic activity or with lifting more than a kilogram or two.

4. Full details of the worker's current physical capabilities and limitations.

This has been described previously. It would be fair to say that Mr Boric is cognitively able to cope with the demands of his job although heavier lifting and/or a requirement for extended ambulation from worksite to worksite would seem likely to exacerbate his symptoms but not necessarily in a predictable way that can be clearly anticipated and avoided.

5. What do you believe to be the cause of the injury including all contributing factors, both work and non-work related (e.g., degenerative, genetic, non-work-related events, etc.) and the extent to which they have contributed?

I think it is quite conceivable that the initial problem occurring within hours of the vaccination was the result of a mild, non-infective pericarditis but this would reasonably be expected to resolve spontaneously within a month or so, particularly with the addition of colchicine as was the case here. In the months that followed without complete remission of his symptoms, it is rather more difficult to explain the persistence of these symptoms in terms of pericardial inflammation (pericarditis).

Mr Boric has certainly drawn an association between his symptoms and the Moderna vaccine based on many hours of searching the internet and also between the naturopathic medications he takes and reported improvements in these symptoms.

On attempting to challenge some of these views deriving from less reputable internet sources it was difficult to deter Mr Boric from his perception of their causation. As an extension of that he offered in support his experience of apparent improvements whilst on the array of naturopathic medications he currently takes.

6. In your opinion is the Moderna COVID-19 Vaccination a significant contributing cause of the worker's injury and current condition?

The Moderna COVID-19 vaccination may well have been associated with a mild bout of pericarditis supported by (unconfirmed) ECG changes noted in the emergency department of Lyell McEwin Hospital on 17 January last year. There is no evidence to suggest that this inflammatory process has become self-sustaining or persistent with a normal raft of blood investigations and an MRI scan (cardiac) that were essentially normal. The exception is a single elevated homocysteine level of 22 and the aforementioned d-Dimer elevation. I doubt the significance of these minor disturbances of serum biochemistry.

7. What is the expected recovery time frame for this type of injury/condition?

The expected recovery time for this type of condition would be in the vicinity of two to three months in severe cases.

8. Is Mr Boric recovering as would be expected and, in your opinion, are there any barriers that have prevented or caused a delay in improvement of his injury?

Mr Boric is not recovering as expected and this is unlikely to be the result of a localised autoimmune response such as pericarditis. He has become de-conditioned compared to his pre-injury state and I do wonder whether he is becoming frustrated with the fact that he can no longer achieve levels of aerobic activity or ease of lifting that he was quite capable of prior to the vaccination. Arguably attempts to do this could promote and perpetuate muscle strains in the pectoralis area on the left side. The question of whether an underlying mood disorder, anxiety or depression, is making for a delayed recovery is difficult to answer but this is another potential reason for Mr Boric struggling to resume his previous levels of fitness.

Mr Boric remained emphatic that the medications prescribed by various naturopaths were contributing to the periods of improvement in his chest pain and that without them his health would deteriorate.

9. Mr Boric has been certified fit to work 3 non-consecutive days (to date he has been working consecutive days of Tuesday to Thursday each week) since initial certification.

With regards to the work-related condition, is Mr Boric fit for pre-injury hours and duties, being 37.5 hours per week? If not, please advise the current capacity for work and what restrictions will need to be taken into consideration.

In theory Mr Boric could cope with 37.5 hours per week in mostly sedentary environments or those not requiring extensive ambulation, but I am not sure that he would have the confidence to do so. I would be recommending that he gradually extend himself to this level. If this is substantially a case of abnormal illness behaviour then I would say that the longer it persists the more difficult it will be to resume the work and home based activity levels he enjoyed prior to his illness. Clearly a clinical psychology or psychiatry opinion would be better placed than mine in this regard.

10. With regards to the aforementioned alternate medication and IV vitamins recommended by Dr Kaur and the naturopath, is there any measurable benefit to improve Mr Boric's injury/condition with continued use.

Please explain your response. Please also advise if there are any contraindications or the efficacy of each.

On the face of it I would say that the alternative/naturopathic medications and supplements, both oral and intravenous, would not likely be making a "measureable benefit" to the restoration of Mr Boric to full health and activity levels. This is not to minimise the benefits of even a placebo in a situation where abnormal illness behaviour or a mood disorder is at play.

The administration of intravenous vitamin C as part of a naturopathic regimen for Mr Boric's persistent symptoms could not be recommended by me. At the very least it is incurring financial costs for Mr Boric that are unlikely to translate into sustained improvement in his quality of life.

11. In your opinion, what treatment including intensity and duration would be beneficial for the worker with regards to his condition at this time? Please include indication for further specialist intervention or further tests that should be carried out.

I would say a graded program of increased exercise, aerobic and static lifting may well be effective most definitely with psychological support.

12. Your prognosis and any other comment you wish to make.

Repeated reassurance at the lack of any objective findings of ongoing serious pathology has not seemed to alter Mr Boric's views regarding his symptoms during this assessment. This suggests to me that the prognosis for Boric's return to full levels of work and family life in the short term is poor.

I advise that I have prepared this report in accordance with the South Australian Employment Tribunal Rules, PART 14 – Expert Evidence, Rule 66 'Content of expert reports' which came into effect on 3 February 2022.

The contents of this report are true to the best of my knowledge and belief.

Please do not hesitate to contact me if I can be of any further assistance.

Yours faithfully

Dr Richard Newman
MB BS, FRACP, FCICM
Consultant General Physician