DR CHRISTOPHER NEIL MBBS FRACP PhD

Cardiologist and Cardiac Imaging Specialist www.drchrisneil.com



Tuesday, 4th June 2024

Dr Battula Narasimha Raja Europa Medical Centre 287 Salisbury Hwy SALISBURY DOWNS SA 5108 Fax:

Dear Battula,

RE: Mr David Harris DOB: 24/04/1993

8A Margaret Ave, SALISBURY SA 5108 Medicare no. 5157 20381 2/1 Mobile 0477005226

It was a pleasure to catch up with Mr David Harris by telehealth. As you know, he requested my input upon the recommendation of his father, whom I see. He is 31 years of age and currently not in regular employment.

He had an **acute coronary syndrome** at the age of 27, which occurred out of the blue. At the time, he was wrestling with a dog playfully on the floor and felt a kind of a "pop" sensation in his chest with pain developing, which would not subside. He attended the Royal Adelaide Hospital and to everyone's surprise, he had evidence of myocardial ischemia, leading to inpatient cardiac catheterisation.

Recalling these events, David indicates that there was some deliberation about whether to intervene upon the coronary lesion or not. This may mean that the type of lesion was atypical, e.g. a coronary dissection, or the severity of the obstruction was equivocal, which often prompts a discussion about stent implantation versus conservative management. I will need to see the documentation and coronary anatomy, but I doubt that he had ST elevation: in this high risk circumstance, there would likely have been less discussion. Nevertheless, at least one **coronary stent** was implanted and I need to check the source documentation.

There is a significant **family history** of atherosclerotic coronary disease. David's father, Peter, 60 years of age, had a coronary disease beginning in his mid 50s and now has a reduced ejection fraction with an AICD. David's grandfather also died prematurely due to presumed coronary disease. David had a **very high cholesterol** measured at age 20, with an LDL of 4.8 mmol/L and a total cholesterol ~6.5 mmol/L. On recent testing, his total cholesterol was 10.0 mmol/L per litre and his LDL was 8.2 mmol/L, noting that he has not been taking lipid-lowering therapy. His HDL concentration is 1.15 mmol/L, which is not terribly low, and his triglycerides are normal. David likely has **Familial Hypercholesterolaemia** (FH).

His **lipoprotein (a) level** is also higher than it should be at 0.54 g/L. Risk goes up as this parameter goes beyond 0.30 g/L and this risk appears to be additive to the risk of FH. However, the benefit of PSK9 inhibitors seems to be greatest in those with both a high LDL and abnormal lipoprotein (a) levels.

In terms of the remainder of his cardiovascular risk assessment, his ultrasensitive CRP was 1.3 mg/dL which is excellent and implies minimal vascular inflammation. His HOMA index and other indices of insulin resistance were normal, despite weight gain over the past 12 months. His BMI is 29.7 kg/sqm. David expresses feelings of **depression**, with isolation, irregular sleep patterns and reduced socialisation, which we will continue to discuss. He reports smoking both tobacco (4-8 cigarettes/day) and marijuana, but has has been relatively inactive physically.

In summary, David has revascularised premature coronary disease with a FH and a lipoprotein (a) dyslipidaemia. We discussed **medical management** in some detail, noting that some time ago, he stopped all of his prescribed medications on the basis of not being sure of the ongoing need for these.

- 1. He previously stopped aspirin and ticagrelor, i.e. dual antiplatelet therapy. However, I have emphasised the need to take ongoing **low dose aspirin monotherapy**, particularly because of the presence of intracoronary stents. He will therefore resume aspirin, as prescribed.
- 2. I have also prescribed rosuvastatin at 20 mg daily. I note he previously tolerated statins well, i.e. there was no statin myopathy. We will

- recheck his lipoprotein (a) on statins, since paradoxically increased lipoprotein (a) concentrations have been described with statin use.
- 3. Due to his research into the topic, David is quite motivated to get on **PSK-9 inhibition**, such as evolocumab (Rapatha®), but this requires statin therapy at a maximum tolerated dose.
- 4. In regards to likely **chronic low-grade depression**, we will need to discuss further. He seems interested in TMS, about which I have little knowledge. Pharmacotherapy does not seem to be required. We will discuss options for referral to a psychologist or psychiatrist.
- 5. I have made a request to his previous cardiologist, A/Prof Peter Psaltis, for **medical records**, as appropriate.
- 6. Regarding smoking, he is in a "contemplation" phase for behavioural change in my opinion. He will need to feel empowered to change.
- 7. I do think physical activity would be excellent and affirmed his own suggestion that he find an exercise physiologist.
- 8. I have in mind to see him again shortly and will request an **echocardiogram**.

Kind Regards

Dr Christopher Neil

All referrals/enquiries info@heartwise.me

cc:

Dr Eugene Tho, Hughes St Medical Centre, 160 Unlet Rd, UNLEY SA 5061