

FIRST CASE OF COVID-19 IN IRELAND

Editor.

Covid-19 is the disease caused by SARS-CoV-2 virus¹. Some notable members of this family include MERS-CoV and SARS-CoV which were responsible for epidemics in the past¹. On 11th March 2020, WHO declared Covid-19 to be a pandemic and urged the world to come together in order to slow down further spread of this virus².

We present the first case of Covid-19 diagnosed in Ireland. This middle-aged lady travelled to Northern Italy and returned on 17th February 2020. On the same day, she developed general malaise and cough. Symptoms persisted and she developed dyspnoea and fever which prompted her to seek advice from her GP.

Following advice from the Public Health Agency, samples were taken, and on the 26th February, SARS-Coronavirus -2 RNA was detected in a Nasal and Throat Swab (NTS) using previously published real-time PCR assays³. Briefly, the screening assay targeted the RNA dependent RNA polymerase (RdRP) gene, with positivity confirmed using assays targeting the envelope (E) and nucleocapsid (N) genes. RNA was extracted with the MagNAPure Compact system (Roche, UK) and real-time PCR for each gene target run as a 25ul reaction (containing 5ul RNA, 12.5ul of 2X Superscript III of step RT-PCR reaction buffer, 0.4uM dNTPs, 3.2mM MgSO₄, 1ul of RT/Taq enzyme (Invitrogen, UK) and primer and probe concentrations for the respective assays. PCR cycling conditions using LightCycler 480 II were as follows: 55 °C for 10 min for reverse transcription, 95 °C for 3 min and 45 cycles of 95 °C for 15 s, 58 °C for 30 s. Ct values less than 40 were reported as positive.

On the 27th February, the patient was admitted for clinical observation and containment. She reported the following symptoms during her stay: cough, night sweats, fever, nausea, loose BO, dyspnoea, chest pain, nausea, general malaise and headache. Her vital signs showed low grade pyrexia with a maximum temperature of 38°C. The lowest peripheral oxygen saturation was 92% (on room air). She remained haemodynamically stable throughout her stay. Blood investigation showed mild leucopenia at 3.5x10⁹cells/L, lymphopenia at 0.9x10⁹ cells/L, and maximum CRP was 27 mg/L. X-ray demonstrated no evidence of pneumonia. The NTS remained positive until last sampled on the 11/3/2020 (i.e. at least 15 days' duration). She suffered ongoing dyspnoea on minimal exertion. Investigations including D-Dimer, Cardiac Troponin, ECG and CXR demonstrated no acute abnormality.

This lady had a mild clinical episode of Covid-19. Young et al reports prolonged viral shedding in nasopharyngeal samples up to 24 days⁴. As this pandemic unfolds, admission will be reserved for confirmed and suspected cases with symptoms and signs of severe disease.

Written informed consent was obtained from the patient for

publication of this case report.

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MYELOLIPOMA IN THE KIDNEY TRANSPLANT: A UNIQUE ENTITY TO BE ACKNOWLEDGED

Editor,

Kidney transplantation is the best treatment option for end stage renal disease and the impact of cancer affecting the transplanted graft is higher when compared to the general population. It significantly affects the patient quality of life, meaning return to dialysis, along with worse life expectancy¹. It is therefore envisaged to be able to discern between benign lesion treatable conservatively or with surveillance and those requiring graft nephrectomy². In particular, misdiagnosis of rare entities such as myelolipoma, could represent a challenge requiring dedicate expertise.

Myelolipoma is often incidentally discovered, with no laboratory alterations. Less than 10 cases have been reported in the native kidney as well as in the surrounding tissue³. There is no association with gender and tends to be more common in the seventh decade of life, with the first case described in 1905 by Gierke in the adrenal⁴, its preferential site. On imaging, it tends to show as a solid mass with fat density attenuation and no contrast-enhancement.

At our Institution, we have treated the only myelolipoma involving a transplanted kidney. This was in a 48 years old male with persistent high C-reactive protein levels,



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despite no infection source identifiable. His past medical history included Bardet–Biedl syndrome, blindness and kidney failure secondary to reflux nephropathy, for which he underwent deceased donor kidney transplantation 20 years before that worked for 18 years. The failed transplant was left in situ for the remaining two years, on immunosuppression consisting of cyclosporine and prednisolone. At this time, he experienced repeated hospital admission with raised inflammatory markers and fever. On imaging concerns were raised about liposarcoma around his left sided renal transplant (Figure 1). Decision was made to proceed with graft nephrectomy and excision of the retroperitoneal mass

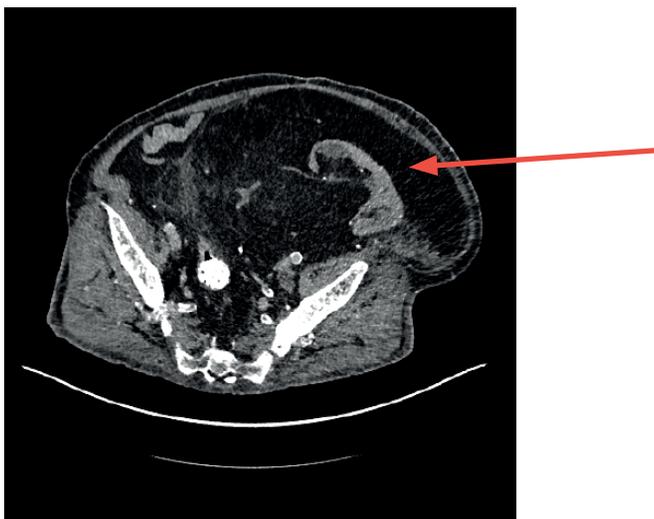


Figure 1 - Suspected malignant lesion surrounding the left sided kidney transplant (arrow)

(Figure 2). The operation required also ileofemoral arterial bypass and ileofemoral venous bypass in order to achieve radical oncology. Post-operative course was characterised by deep vein thrombosis, for which he was therapeutically treated with enoxaparin. The patient was discharged on 12 days after surgery, with current follow up of 1 month.



Figure 2 - Specimen.

In view of this unicity, the majority of clinicians would be unfamiliar with the features and management of myelolipoma

in the kidney graft, and indeed even our first diagnosis was of a malignant lesion leading us to pursue a more aggressive treatment, with major vascular reconstruction. The patient was already on dialysis, but more debate regarding the most effective treatment would rise for working grafts. Retrospectively, more awareness of this rare disease, with attention to its radiological features and consideration of risk factors such as endocrine (Bardet–Biedl syndrome) and hematopoietic disorders (long effects of immunosuppression) might have been considered and possibly modified the intended radical oncology.

In conclusion, treatment options of rare benign diseases such as myelolipoma have to be tailored to patient needs, with a conservative management preferable for small, asymptomatic lesions or working grafts and partial/radical nephrectomy in enlarging masses. Embolization is rarely effective, as often the only vascularity present is small and peripheral.

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