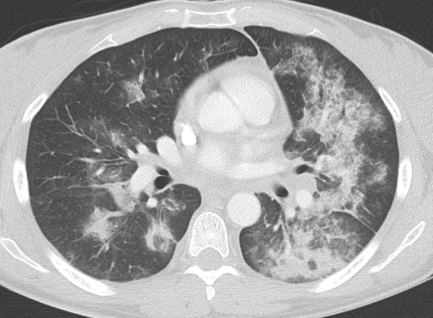
|  |  |  |  |
| --- | --- | --- | --- |
| **Test** | **Results** | **Units** | **Ref Range** |
| Haemoglobin | 87 | g/L | 120 to 160 |
| WBC | 8.9 | 10^9/L | 4.0 to 11.0 |
| PLATELET | 678 | 10^9/L | 150 to 450 |
| MCV | 85 | Fl | 78 to 97 |
| NEUTROPHIL | 6.8 | 10^9/L | 1.7 to 8.0 |
| LYMPHOCYTE | 1.6 | 10^9/L | 1.0 to 4.0 |
| MONOCYTE | 0.3 | 10^9/L | 0.24 to 1.1 |
| EOSINOPHIL | 0.1 | 10^9/L | 0.1 to 0.8 |
| BASOPHIL | 0 | 10^9/L | 0.0 to 0.3 |
| HCT | 0.28 |  | 0.37 to 0.47 |
| INR | 1.4 | Ratio | 0.8 to 1.1 |
| D-DIMER | 1071 | ng/ml | 21 to 300 |
| SODIUM | 136 | mmol/L | 133 to 146 |
| POTASSIUM | 4.5 | mmol/L | 3.5 to 5.3 |
| CHLORIDE | 100 | mmol/L | 95 to 108 |
| BICARBONATE | 24 | mmol/L | 22 to 29 |
| UREA | 9.4 | mmol/L | 2.5 to 7.8 |
| CREATININE | 85 | umol/L | 60 to 110 |
| eGFR | >60 | mL/min/1.73m2 |  |
| BILIRUBIN | 12 | umol/L | 0 to 21 |
| ALANINE TRANSAMINASE | 33 | U/L | 0 to 40 |
| ALKALINE PHOSPHATASE | 145 | U/L | 30 to 130 |
| ALBUMIN | 28 | g/L | 35 to 50 |
| GAMMA GT | 180 | U/L | 0 to 38 |
| C REACTIVE PROTEIN | 294.1 | mg/L | 0.0 to 10.0 |
|  |  | | |
| Arterial p H | 7.4 |  | 7.35-7.45 |
| Arterial PO2 on air | 10.0 | kPa | 10.5-13.5 |
| Arterial PCO2 on air | 3.78 | kPa | 4.7-6 |
| Arterial Lactate | 2.0 | mmol / l | <1.6 |
| Arterial HCO3 | 25.0 | mEq/ l | 22-26 |
|  | | | |
| Urine casts | Negative | - | - |
| Urine PCR | 51 | mg/mmol | <15 |
| Urine WBC | 15 | /UL |  |
| Urine RBC | 2 | /UL |  |
| Epithelial Cells | 2 | /UL |  |
| Urine culture | No growth | - |  |
| Chest XRay | Patchy air space opacification in the left middle and lower zone and the right mid zone | | |

**Table 1: Investigations on presentation**

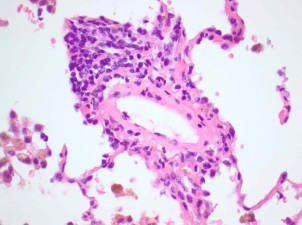
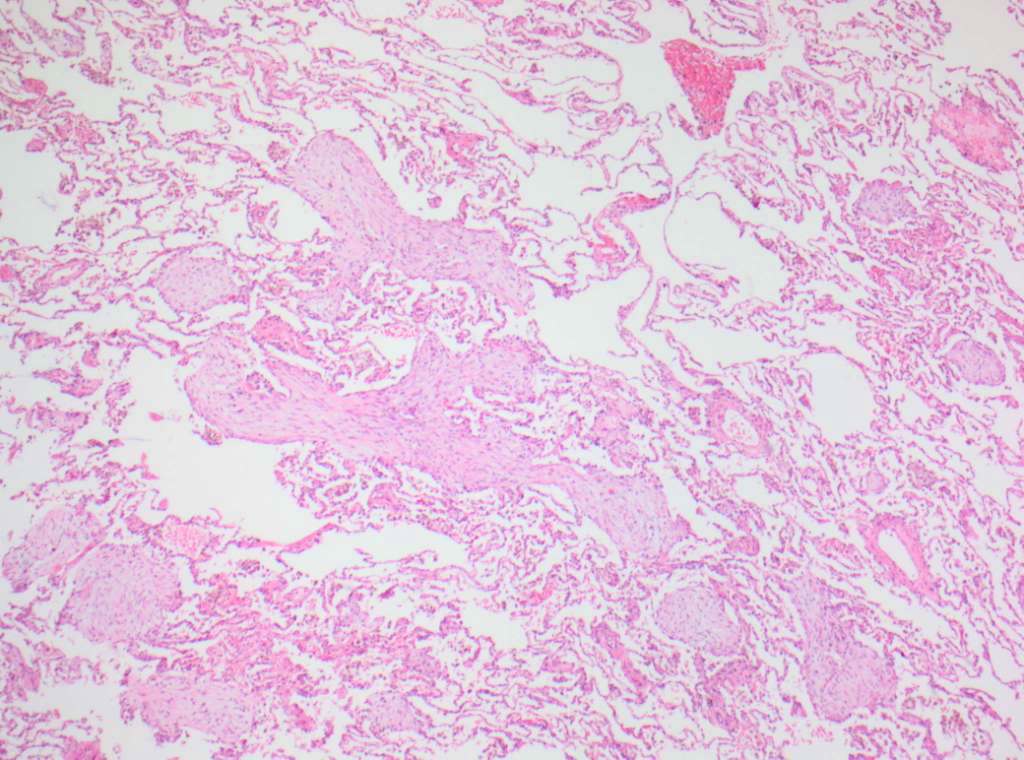
Figure 1: CT Thorax

**Figure 1: Computed tomography of the thorax shows extensive bilateral patchy air space infiltrates and ground-glass changes.**

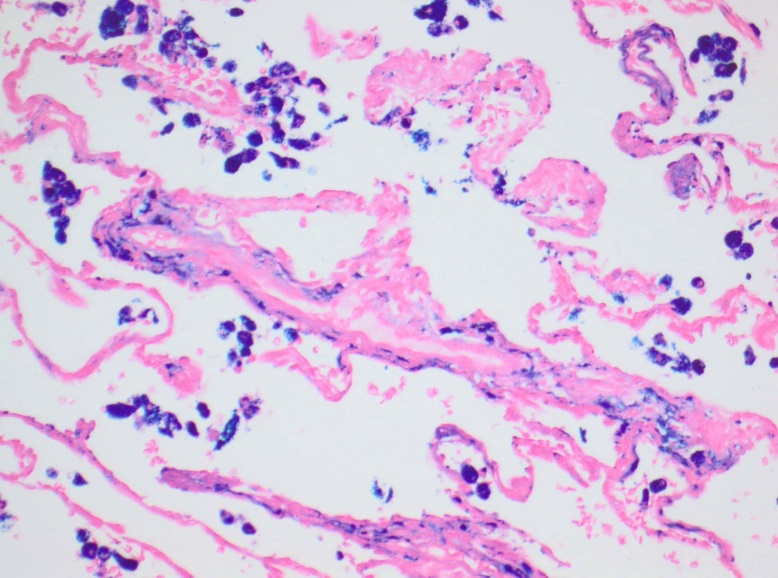
|  |  |  |  |
| --- | --- | --- | --- |
| **Test** | **Results** | **Units** | **Ref Range** |
| Influenza A, Influenza B, Parainfluenza, Rhinovirus, | Negative |  |  |
| Coronavirus, RSV, Metapneumovirus, Adenovirus, | Negative |  |  |
| Bocavirus, Enterovirus, Parechovirus and | Negative |  |  |
| Mycoplasma pneumoniae. | Negative |  |  |
|  |  |  |  |
| Total Protein | 59 | g/L | 60 to 80 |
| Immunoglobulin G | 10.2 | g/L | 6.0 to 16.1 |
| Immunoglobulin A | 3.1 | g/L | 0.8 to 2.8 |
| Immunoglobulin M | 1.0 | g/l | 0.5 to 1.9 |
| Complement C3 | 1.4 | g/l | 0.75 to 1.65 |
| Complement C4 | 0.18 | g/l | 0.14 to 0.54 |
| IgG anti citrullinated peptide | <1 | U/Ml | 0 to 7 |
| IgG anti glomerular basement membrane | <3 | U/Ml | 0 to 10 |
|  |  |  |  |
| Antinuclear antibody | NEGATIVE |  |  |
| ANCA staining pattern | C-ANCA pattern |  |  |
| IgG anti proteinase 3 | <2 | U/ml | Positive >3.0 |
| IgG anti myeloperoxidase | <2 | U/ml | Positive >5.0 |
| Rheumatoid Factor | 586 | iu/ml | 0 to 20 |
| IgG anti SS-A | NEGATIVE |  |  |
| IgG anti SS-B | NEGATIVE |  |  |
| IgG anti Sm | NEGATIVE |  |  |
| IgG anti RNP | NEGATIVE |  |  |
| IgG anti dsDNA | <10 | IU/Ml | 0 to 30 |
| IgG anti -cardiolipin | NEGATIVE |  |  |
| IgG anti beta-2 glycoprotein 1 | <4 | IU/Ml | 0 to 15 |
|  |  |  |  |

**Table 2: Viral Serology & Immunology**

**Figure 3: Wedge Lung biopsy**

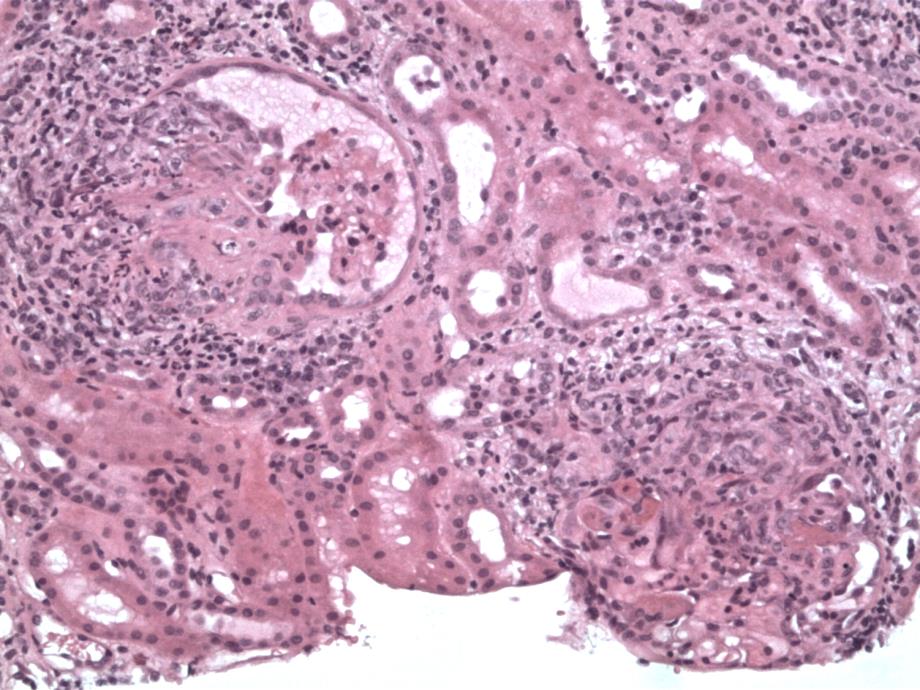


**Figure 3a: Low power view of lung demonstrating focal organising pneumonia (arrow) and subtle perivascular inflammation (insert)(H&E stain).**



**Figure 3b: Higher power view of lung showing coarse haemosiderin deposition within alveolar macrophages (solid arrow) and fine deposition within alveolar septa and the wall of a small blood vessel (open arrow - pulmonary haemosiderosis).**

**Figure 4: Renal Biopsy**



**Figure 4: The biopsy shows a kidney in which there is evidence of an acute necrotising glomerulopathy (solid arrow) with a relatively good background that appears to be pauci-immune. There is also some evidence of vasculitis.**