



## SAMPLE LONG CASES

### LONG CASE 1

(Time available 1 hour, including report writing)

*Please read the clinical history and macroscopic findings (see below and over leaf), and then examine the histological slides.*

In your answer book, please write up:

1. A full description of the neurohistological appearances.
2. Any further stains or tests (if any) that you feel are necessary.
3. Your neuropathological diagnosis and, if indicated, the differential diagnoses.
4. A clinico-pathological discussion of the diagnosis and the relationship of the pathological findings to the clinical history.

*Code for slide labels:* Case reference "PB1456/12, Woolacott" appears on each slide.

### H&E stained slides.

Slide label	Site
A	Right superior frontal lobe
B	Right superior parietal lobe
C	Right occipital lobe
D	Left temporal lobe
F	Left corpus striatum
H	Thalamus
G	Medulla
I	Midbrain
J	Pons
K	Cerebellum
L	Cerebellum
M	Cervical cord
O	Thoracic cord
N	Lumbar cord



### Special Stains

Sections also stained with luxol-fast blue/cresyl violet (LFB/CV) and phosphotungstic acid haematoxylin (PTAH)

The following immunohistochemical preparations are provided:

Slide label	Antibody to
Alpha-syn	Alpha synuclein
A4	Beta amyloid A4
tau	AT8 antibody to phosphorylated tau
p62	Sequestosome
TDP43	TAR DNA polymerase 43
Ub	Ubiquitin

### Clinical history

71 year old man with progressive dysphasia, followed by bulbar weakness and difficulty in swallowing. Fairly rapid progression associated with weight loss. Died of bronchopneumonia approximately 11 months after presentation.

### Macroscopic findings

The brain shows a mild degree of swelling and weighed 1314g. The brain showed some autopsy removal artefact but no obvious cortical atrophy. The basal ganglia are of normal bulk and there is possible mild pallor of the substantia nigra. The brainstem, spinal cord and cerebellum appeared normal.



## LONG CASE 2

(Time available 1 hour, including report writing)

*Please read the clinical history and macroscopic findings (see below and over leaf), and then examine the histological slides. .*

In your answer book, please write up:

1. A full description of the neurohistological appearances.
2. Any further stains or tests (if any) that you feel are necessary.
3. Your neuropathological diagnosis and, if indicated, the differential diagnoses.
4. A clinico-pathological discussion of the diagnosis and the relationship of the pathological findings to the clinical history.

*Code for slide labels:* Case reference “PM97/21, Clements” appears on each slide.

**H&E stained slides. Brain sections also stained with luxol-fast blue/cresyl violet (LFB/CV) and phosphotungstic acid haematoxylin (PTAH)**

Slide label	Site
A	Frontal lobe
B	Temporal lobe
C	Basal ganglia
D	Midbrain
E	Pons
F	Pons
G	Medulla
H	Cerebellum
I	Spinal cord
J	Lung
K	Lung
L	Uterus
M	Thyroid
P	Right ovary

### Special Stains

The following immunohistochemical preparations are provided:

Slide label	Antibody to
tau	AT8 antibody to phosphorylated tau
A4	Beta amyloid A4
Alpha-syn	Alpha synuclein

### Clinical history

74 year old woman admitted with progressive difficulty in walking with some ataxia and clinical and electrophysiological evidence of an axonal neuropathy. She deteriorated over 6 months and died with bronchopneumonia. At autopsy it was noted that the right ovary was slightly enlarged and adherent to adjacent structures.

### Macroscopic findings

The brain weighed 1060g and showed a mild degree of generalised atrophy. Brainstem and cerebellum together weighed 111g. The cortical ribbon appeared intact and the basal ganglia were of normal bulk and the substantia nigra showed normal pigmentation. The brainstem, cerebellum and spinal cord appeared normal.