Ragwort is a very common plant with yellow flowers. It is often seen growing on rough land and on the roadside verges. It can also be found on pasture, particularly on overgrazed and ‘starvation’ paddocks. When it is growing it is unpalatable to horses, but when wilted or dried in hay it loses its bitter taste and will readily be eaten but unfortunately retains its toxic properties. The toxins in ragwort damage the liver; signs are often only seen months or years after the plants were eaten. The liver is able to continue to function normally until at least half of it is damaged; this means that damage is often advanced before signs are seen.

**CLINICAL SIGNS**

Toxicity can be caused by low levels over a long period of time and there can be a delay of months or years from exposure to ragwort before the signs develop. The signs of liver damage are varied and are often nonspecific but include:

- jaundice (yellow discolouration of the gums and eyes);
- depression weight loss and poor appetite;
- low grade colic and/or diarrhoea;
- oedema (fluid retention in the legs and under the belly);
- photosensitisation (the pink areas of the skin can become red and blistered with normal levels of light);
- behavioural signs such as disorientation, circling, repeated yawning and pressing the head against the wall;
- increased thirst;
- bleeding disorders.

Many of these signs are caused by the liver’s failure to detoxify the natural by-products of digestion and metabolism.

**DIAGNOSIS**

- Blood samples can show indicators of liver damage and reduced liver function.
- Diagnosis can be confirmed with an ultrasound scan and liver biopsy.

**Key Points:**

- prevention is far better than cure;
- toxin accumulates after low level ingestion over months or years;
- plant usually unpalatable but palatability increases when cut or dried;
- either spray or pull up and burn all ragwort on pasture;
- purchase hay/haylage from reliable sources.
Treatment

- There is no specific treatment or antidote that will cure the disease or reverse the damage to the liver.
- Treatment is aimed at minimising the work of the liver and supportive therapy.
- The patient may respond to treatment if diagnosed early.
- The diet can be altered to contain low but adequate levels of good quality easily digestible protein to prevent the overproduction of ammonia.
- A good diet for most cases is a combination of two parts sugar beet to one part maize or barley fed in six small meals daily plus adlib grass or hay.
- Dietary vitamin supplementation can help to support the liver but care must be taken because high levels of iron, vitamin A, niacin, valerian and comfrey can all further damage the liver.
- Milk thistle has been shown to support liver function.

Prevention

- Ragwort should be removed from pasture prior to seeding to prevent the spread of the plants.
- Plants are best dug out, or levered out using a specially designed fork and removed and burned.
- The toxins can be absorbed through human skin so gloves must be worn whenever handling the plants.
- Broad leaf herbicides can be used but avoid making hay for one month after use to allow plant to die fully.
- Make every attempt to ensure that the source of hay or haylage used does not contain ragwort.
- Grazing with sheep may help as they are less susceptible and will graze off the young shoots in spring.
- Good grassland management can help.
- Routine blood screens can provide an early warning of disease.