



# MISUSE OF THE HERBICIDE CHLORMEQUAT AS EUTHANASIA AGENT IN VETERINARIAN PRACTICE, AN EMERGING PROBLEM?

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## OBJECTIVE

We present two cases of lethal secondary intoxication of dogs after ingestion of parts of the body of animals euthanized with chlormequat.

### CASE 1:

A dog died after licking the open wound of a horse euthanized with a double intravenous dose of 5 mL Stabilan® 750 (chlormequat chloride 750 g/L) by a veterinarian. The open wound was a jugular incision, made for autopsy purpose.

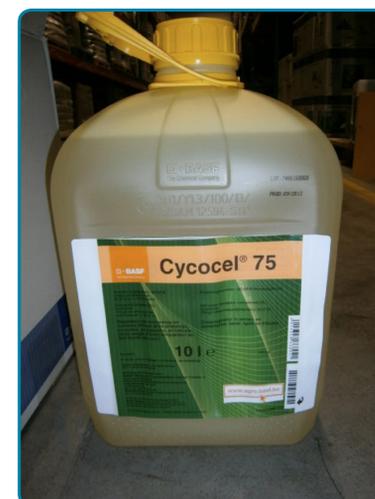
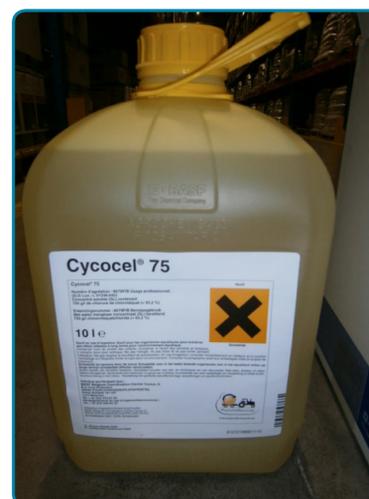
Shortly after exposure, the dog developed vomiting, black diarrhoea, mydriasis, and tremor. The dog died 20 minutes after the first symptoms.

### CASE 2:

A border collie died 1 hour after eating the entrails (liver, kidneys) from the open abdomen (probably for autopsy purpose) of a lamb euthanized by an intravenous injection of 4 mL Cycocel® (chlormequat chloride 750 g/L).

Quickly after ingestion, the dog started to vomit, developed convulsions and difficulties of breathing. The veterinarian reported bronchial hypersecretion, bradycardia, and shock.

Symptomatic treatment was initiated but was unsuccessful.



## DISCUSSION

Chlormequat chloride, also called chlor(o)choline chloride is a plant growth regulator marketed in Belgium under 8 different brand names.

Although chlormequat poisoning clinically resembles that seen with anticholinesterase compounds, it is not an acetylcholinesterase inhibitor and atropine seems to worsen the situation.<sup>1</sup>

These 2 case reports prompted us to perform a short inquiry among farmers and veterinarians. From the answers we got, the misuse of chlormequat to euthanize animals seems to be a known practice in the agricultural world.

In the literature, we found no report of chlormequat intoxication in animals and scarce reports of chlormequat ingestion, most of them lethal, in humans.<sup>2,3</sup>



## CONCLUSION

We would like to draw attention to the misuse of chlormequat and the risk of life-threatening secondary poisoning. We find it important to collect and share data about this dangerous malpractice to get a clear grasp on the scale of the problem.



## REFERENCES

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