

How much can I.V. Catheter Twist in Equine Jugular Vein?

Boldizar Martin, DVM., Vidrickova Petra, DVM.,

Equine Clinic, University of Veterinary Medicine Kosice, Komenskeho 73, 041 81, Kosice, Slovak Republic

boldizar@uvm.sk

Material and method

Experimental group was created from horses n = 57 of various breed, average weight was 545,62±130,47 SD and average age was 11,15±6,63 SD. To peripheral i.v. catheterization we used 44 i.v. catheters of various types (Vasofix Braunüle, Vygonüle S, INTRAFLO 2, Secalon T) and 13 central venous catheters (Certofix and ARROW - EIDTM). The place of insertion was everytime *vena jugularis*. We used 2 techniques of i.v. catheters insertion *Over the needle* and *Over the wire technique (Seldinger method)*. Purpose of their insertion was in 31 cases surgery, in 25 cases fluid therapy and repeated drug administration and in 1 case fluid therapy related with blood transfusion. We monitored the length of insertion of single types of i.v. catheters and complications like as their crank.

Results

Minimal length of i.v. catheter insertion was 0,5 hour at Vasofix Braunüle i.v. catheter, which was pushed out into the subcutis. Maximal length of i.v. catheter insertion was 384 hours (16 days) at catheters INTRAFLO 2 and Certofix.



Typ of i.v. catheter	Min. time of ins. in hours	Max. time of ins. in hours
Vasofix Braunüle	0,5	72
Vygonüle S	24	120
ARROW - EIDTM	96	96
Secalon T	96	336
INTRAFLO 2	96	384
Certofix	96	384



Maximal amount of cranks per one catheter was 6 cranks recorded at catheter Vygonüle S and at catheter Vasofix® Braunüle we recorded 5 cranks. At catheters ARROW - EIDTM and Certofix® we didn't record any crank.



Typ of i.v. catheter	Amount	Total amount of crank	Average amount of crank per one catheter
Vasofix Braunüle	13	29	2,23
Vygonüle S	6	19	3,16
ARROW - EIDTM	1	0	0
Secalon T	3	4	1,33
INTRAFLO 2	16	34	2,13
Certofix	10	0	0

