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Many works are based on the assumption of the impact of blood drops in a perpendicular straightforward direction. This model is applicable in our view when the traces of blood spots are on a wall. However, if there are drops of blood on the floor, we think that a linear impact model should not be used, because it ignores the force of gravity. This is also why we decided to use a different method of calculation. The calculations were based on the parabola and its trajectory with a specially modified formula. We will not state the results of this experiment, because of its inaccuracy with regard to the original model. Furthermore, the inaccuracy analogically increased with the distance. At a distance of 10meters, the deviation reached an inaccuracy of 100% from recorded measurements. At this time, this method of the linear model is commonly used around the world. Knock and Davison in their work (9) emphasize the effect of gravity on a blood drop. Their study was based on the variability of the results determining the angle of impact of drops. The work of Wells (16) indicates that the true origin of a drop of blood is dependent on several factors, including flight dynamics of drops of blood. On the other hand, there was no ideal pattern found, because variation is due to the dependence of drag force on droplet diameter and velocity, which is different for each droplet. Bloodstain patterns were evaluated by various techniques to investigate their size, speed and also their formation (7). In the one perfect experimental work by Behrooz et al. (4), which deals with the underlying mechanisms of blood disintegration and its subsequent effect on the area of origin calculations, it was stated that this was found to be very accurate with a maximum offset of only some mm.

In conclusion, we state that we are new to this field, but we have tried to find conclusions which would be as accurate using the method described above. The applied experiment was performed responsibly, and with the intencion of further application of this method in veterinary medicine with regard to shooting of animals. On the level of application we came across some problems. After multiple attempts using the method on different models we offer you reputable conclusions, and we recommend the use of this method during investigations and verification of individual acts in criminal and forensic practice.

## ACKNOWLEDGMENT

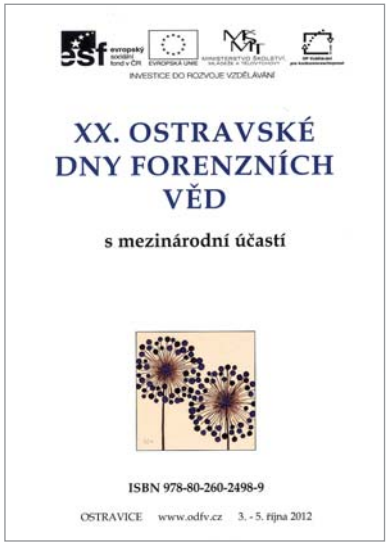
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## ZPRÁVY Z KONFERENCE

# XX. Ostravské dny forenzních věd




Ve dnech 3. – 5. 10. 2012 se v Ostravici ve velmi pěkném a nově zrekonstruovaném areálu Sepetná konaly již dvacáté a tedy jubilejní Ostravské dny forenzních věd s mezinárodní účastí pořádané Ústavem soudního lékařství FN Ostrava a LF Ostravské univerzity. Hlavní odbornou náplní konference bylo přednesení tří desítek příspěvků z různých forenzních oborů, které byly vhodně doplněny neméně zajímavými kazuistikami z řad orgánů činných v trestním řízení. Většina přednášek účastníky velmi zaujala a byla následně hojně diskutována. Organizátorům se podařilo zajistit kromě odborné části i společenskou stránku sjezdu na vysoké úrovni, a to včetně tematicky laděného zahajovacího večera, na kterém byli přivítáni účastníci a členové výboru Společnosti soudního lékařství a soudní toxikologie ČLS JEP, který zde měl své již pravidelné zasedání. V neposlední řadě všem přálo i počasí, jak ostatně zkonstatoval i prof. Fryc během svého závěrečného slova. Všichni přítomní byli na místě pozváni na další již XXI. ročník, který se bude na stejném místě konat 9.–11.10.2013.

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