Glass Cuts in Clothing

Helen R. Griffin
Ventura County Sheriff's Department
Forensic Sciences Laboratory

The Parts Of A Glass Case

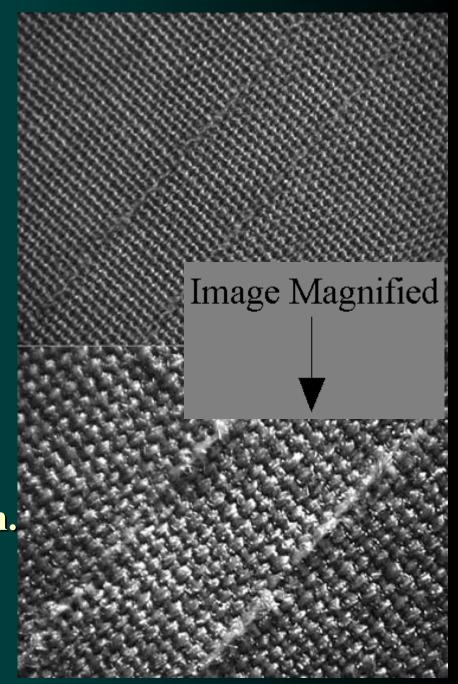
- Is there glass present?
- Is the location/quantity of forensic significance?
- Could the glass have originated from the control source?
- Is there any other probative evidence?

Homicide

Simulation of cuts observed in the suspect's jacket.

Cuts like these could not be duplicated using knives.

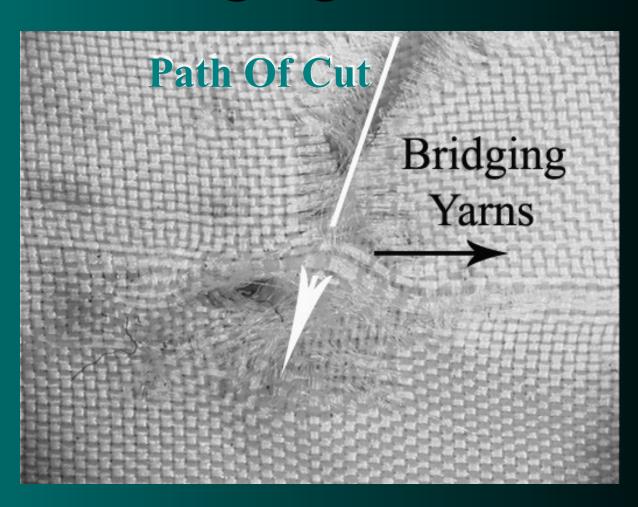
Note that the cuts are barely visible without magnification.







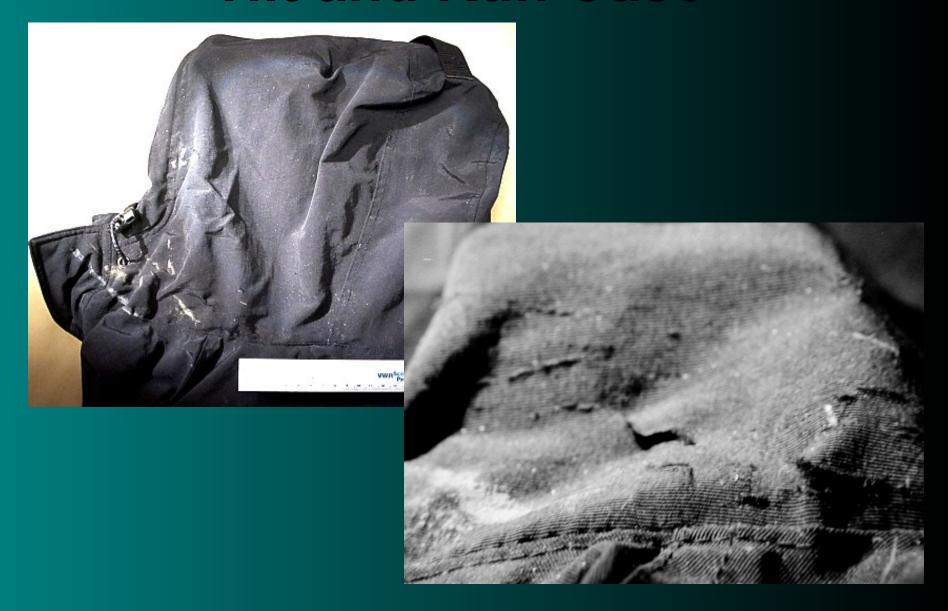
Cuts In Lining - Bridging Yarns



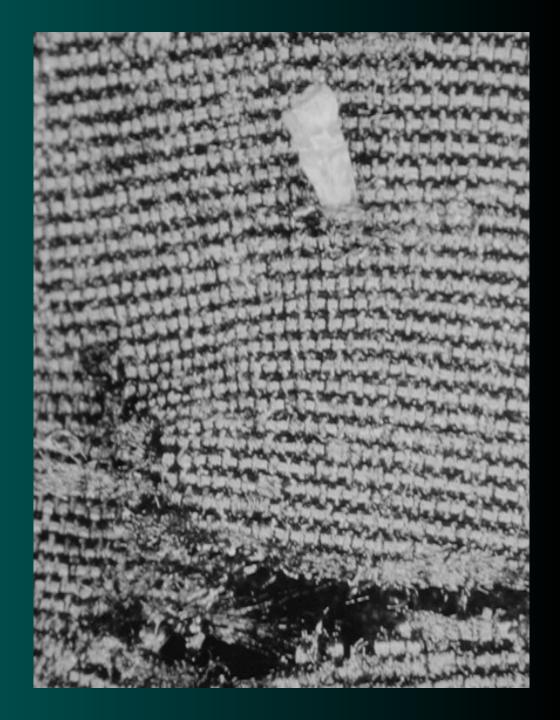
Glass From Between Outside Fabric And Lining



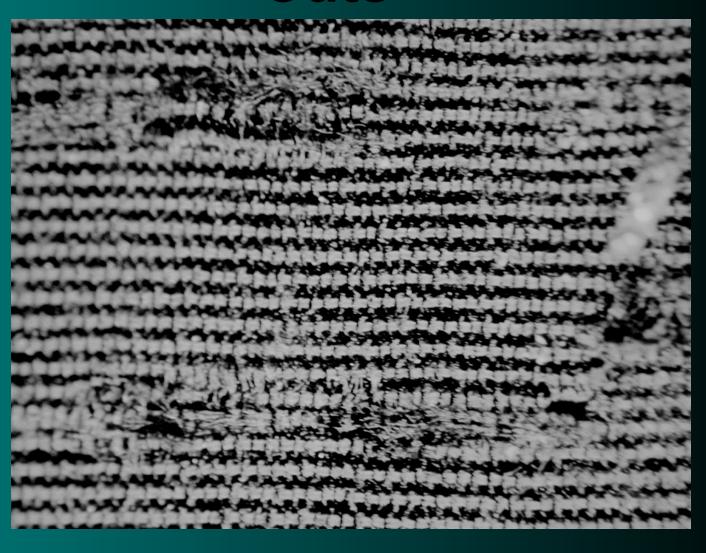
Hit and Run Case



Hit and Run Glass Shard



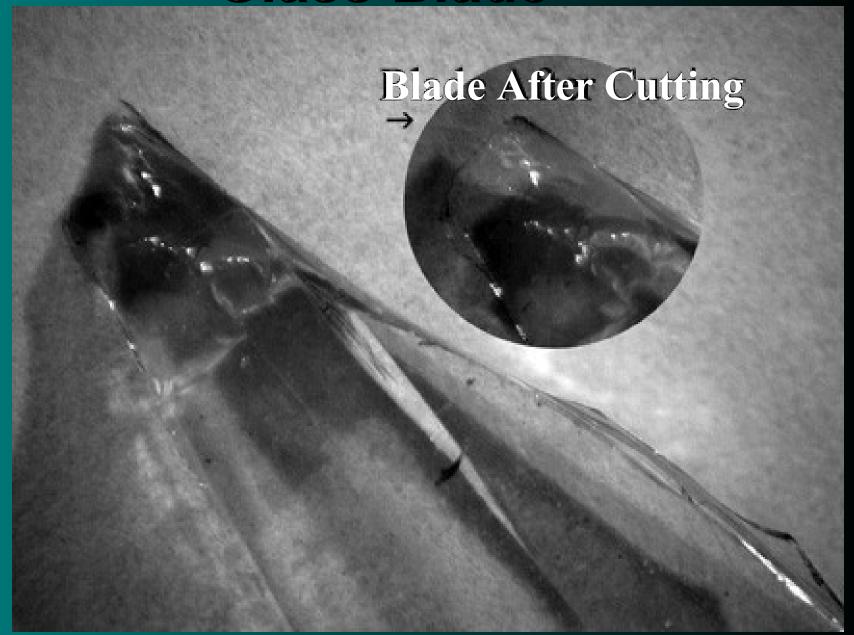
Parallel & Shallow Cuts







Glass Blade

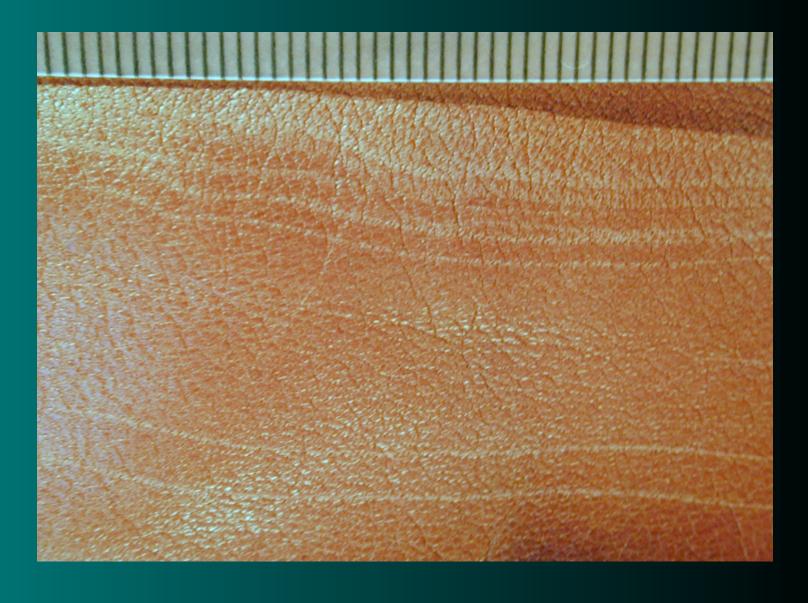


Sharp Cuts





Parallel Cuts



Shallow Cuts: Bridging Fibers

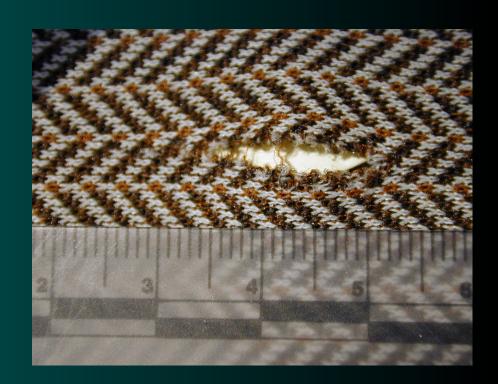




- Sharp cuts
- Multiple cuts: in-line
- Parallel cuts
- Shallow cuts

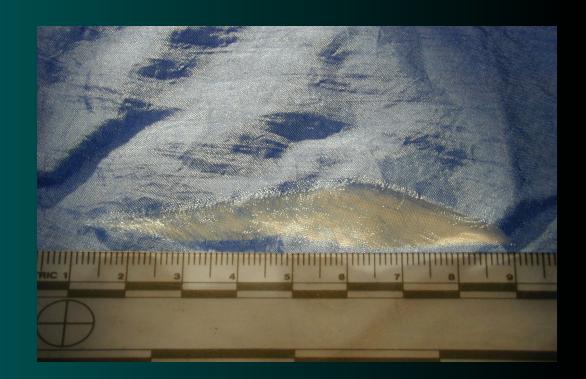
Knit Dress Jacket

- Sharp cuts
- Multiple cuts: in-line
- Shallow cuts: bridging fibers



Nylon Jogging Jacket

- Sharp cuts
- Multiple cuts: in-line
- Shallow cuts: bridging fibers



Woven Shirt

- Sharp cuts
- Multiple cuts: in-line
 - Parallel cuts
 - Shallow cuts

Leather Jacket

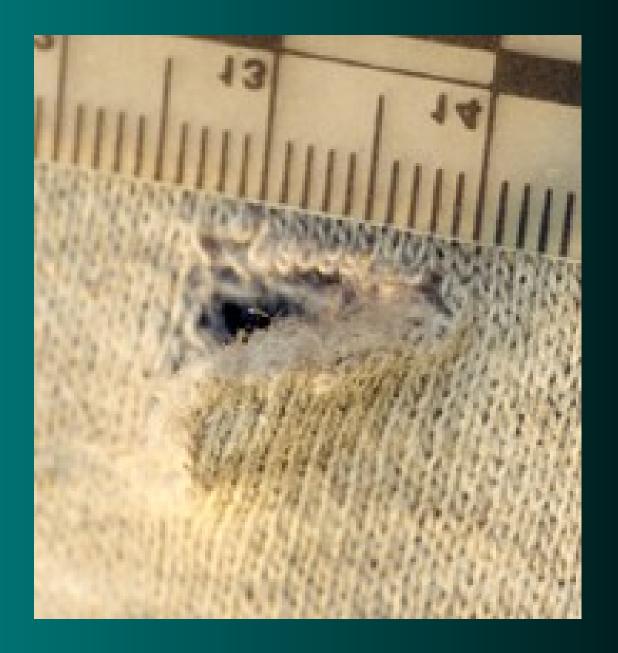
- Sharp cuts
- Multiple cuts: in-line
- Parallel cuts
- Shallow cuts: bridging fibers





thidetisewe

- Sharp cuts
- Multiple cuts: in-line
- Shallow cuts



Tears

Blade Characteristics

- Sharp
- Shallow
- Multiple blades



Are Glass Cuts Probative?



What type of blade do you think made these cuts?

Acknowledgements

The author would like to thank the Washington State Patrol and Ventura County Sheriff's Department for providing the facilities and time to do this study.

Thanks to Val Copeland for assistance with the initial portion of this study.

Thanks to Geoff Bruton for editing.

References

- Taupin, J.M., Adolf F.P., and Robertson, J. Examination of damage to textiles, Forensic Examination of Fibers, Second Edition, J. Robertson, M. Grieve (Eds.), Taylor & Francis, London, 1999.
- 2. Monahan, D.L. and Harding, H.W.J. Damage to Clothing Cuts and Tears. Journal of Forensic Sciences 1990; 35(4): 901-912.
- 3. Taupin, J.M. Testing conflicting scenarios a role for simulation experiments in damage analysis of clothing. Journal of Forensic Sciences 1998; 43(4): 891-896.
- 4. Blackledge, R.D. Forensic Analysis on the Cutting Edge. Wiley-Interscience, 2007.

Contact Information

Helen Griffin

(805)654-3642

helen.griffin@ ventura.org