TOXICOLOGY

ANTHROPOLOGY

CRIMINALISTICS

PROCEEDINGS

American Academy of Forensic Sciences

75th Anniversary Conference



Science Works

PSYCHIATRY & BEHAVIORAL SCIENCE

February 13-18, 2023 Orlando, Florida Rosen Shingle Creek Resort GENERAL

ODONTOLOGY

FORENSIC NURSING SCIENCE

JURISPRUDENCE



410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 636-1100 Fax: (719) 636-1993 Email: info@aafs.org Website: www.aafs.org

PROCEEDINGS

of the American Academy of Forensic Sciences 75th Anniversary Scientific Conference

The *Proceedings* of the American Academy of Forensic Sciences is an official publication of the American Academy of Forensic Sciences (AAFS). It is devoted to the publication of the abstracts of technical oral papers and posters presented at the AAFS Annual Scientific Conference. These include various branches of the forensic sciences such as anthropology, criminalistics, digital evidence, forensic nursing, engineering, jurisprudence, odontology, pathology, psychiatry, questioned documents, and toxicology. Similar submissions dealing with forensic-oriented aspects of the social sciences are also included.

Please note that some of the abstracts included in the *Proceedings* deal with topics, results, and/or conclusions that are controversial. The publication of abstracts does not imply that the AAFS, its sections, or the individual section program chairs/committee members have verified or agree with the studies, results, and/or conclusions of each abstract. During the process of planning a scientific program, it is impossible to "peer-review" each abstract and presentation to the degree that is accomplished during manuscript review. Abstracts and presentations are accepted, in part, so they can be critiqued and reviewed by other scientists. Thus, a forum is created to discuss controversial issues. The views expressed in this publication are not those of the AAFS. The data and opinions appearing in the published material were prepared by and are the responsibility of the contributor(s), not of the AAFS nor its respective employees, employers, officers, and agents. The AAFS does not supply copies of meeting papers. Please write directly to individual authors to obtain copies of specific papers. Presentation of some abstracts may have been scheduled or canceled after the publication of this document.

English is the official language of the AAFS and its meetings; neither oral nor written translations will be provided. Copyright 2023 by the AAFS. Unless stated otherwise, non-commercial photocopying of editorial material published in this periodical is permitted by the AAFS. Permission to reprint, publish, or otherwise reproduce such material in any form other than photocopying must be obtained from the AAFS.

PROCEEDINGS

of the American Academy of Forensic Sciences	February 2023
	Volume XXIX

TABLE OF CONTENTS

Special Sessions	1
Case Break Sessions	5
Luncheon Seminars	8
Workshops	11
Scientific Sessions	
Anthropology	
Criminalistics	171
Digital & Multimedia Sciences	
Engineering & Applied Sciences	
Forensic Nursing Science	
General	449
Jurisprudence	
Odontology	631
Pathology/Biology	654
Psychiatry & Behavioral Science	
Questioned Documents	
Toxicology	836
Last Word Society	
Young Forensic Scientists Forum Posters	909
Financial Disclosure Indexes	
Key Word Index	957
Presenting Author Index	



J18 A Multidisciplinary Approach in a Sexual Homicide Scene

Caterina Bosco, MD*, Department of Public Health and Pediatrics, Turin, Piemonte, ITALY; Lucia Tattoli, PhD, University of Turin, Torino, Piemonte, ITALY; Cristiano Barbieri, PhD, Unità di Medicina Legale e Scienze Forensi "A. Fornari" dell'Università degli Studi di Pavia, Pavia, Lombardia, ITALY; Ignazio Grattagliano, PhD, Dipartimento Di Scienze Della Formazione, Psicologia, Comunicazione – Università Aldo Moro di Bari, Bari, Puglia, ITALY; Francesca Capello, MD*, University of Turin, Torino, Piemonte, ITALY; Giancarlo Di Vella, PhD, University of Turin, Turin, Piemonte, ITALY

Learning Objective: After attending this presentation, attendees will better understand the importance of a multidisciplinary approach in crime scene investigations to successfully disguise the true nature of the events in sexual crime scene.¹

Impact Statement: This presentation will impact the forensic science community by showing that the interpretation of findings from external examination and autopsy should always be considered with considerable caution, especially in psychopathological and criminological field.

A 76-year-old man, obese, with a diagnosis of "psychotic disorder of the paranoid type, with depressive episodes, social maladjustment and sexual identity disorder," was found dead in the bedroom of his apartment. The body was completely naked, except for a scarf around his neck, and lying in a supine position on his bed.

On external examination, three scalp lacerations on the right parietal side (4cm in length), on the occipital side (3cm in length), and skin abrasions on the chin were found. The cause of death was related to the combined effects of positional asphyxia (smothering with a pillow) and blunt head injury. At the death scene, women's clothes were found next to the body. In the bedroom, a coffin lid was leaning against the wall, with a nude male porn star poster attached on it. There was no sign of forced entry or burglary in the house; the deceased's wallet was in the house. A pillow with bloodstains was found beneath the victim's head. Forensic investigators collected several DNA profiles from the coffin, which the victim used for his sexual intercourse fantasies of killing his partners. Surveillance cameras showed a young man entering the victim's apartment before his death, eventually identified as a 28-year-old drug addict and prostitute with a criminal record. Four days later, police arrested the man while he was trying to escape with the victim's laptop and phone. He was charged with murder. The prosecutor assumed that the killer lured the victim on dating apps, and killed him during an attempted robbery. The killer confessed the homicide, but he claimed self-defense. He had gone for a massage, but the old man sexually assaulted him. He hit him on the head with a bottle and the victim fell onto the bed with his face pushed on the pillow, dying shortly after by smothering. Obesity and pre-existing pulmonary diseases had contributed to the death from asphyxia.

The findings from the crime scene investigation and the criminological evaluation permitted his murder charge to be reduced to manslaughter during the criminal trial. The in-depth behavioral analysis of the relationship between the victim (a psychotic patient with a perverse and destructive sexuality) and the murderer (suffering from a personality disorder with antisociality and sexual promiscuity) played key roles in influencing sentencing law changes.

Reference:

Geberth V. J. Sex-Related Homicide and Death Investigation: Practical and Clinical Perspectives, Second Edition (Practical Aspects of Criminal and Forensic Investigations) 2nd Edition, Published June 30, 2010, by CRC Press.

Crime Scene Investigations; Homicide; Paraphilia

Copyright 2023 by the AAFS. Permission to reprint, publish, or otherwise reproduce such material in any form other than photocopying must be obtained by the AAFS.