Contents

Papers

Activated Protein C Resistance Is Uncommon in Sudden Death Due to Pulmonary Embolism—Jennifer J. Rulon, CHONG G. CHO, LINDA L. GUERRA, ROBERT C. BUX, AND MARGARET L. GULLEY Hypernatremia and Subdural Hematoma in the Pediatric Age Group: Is There a Causal Relationship?—TRACEY COREY HANDY, RANDY HANZLICK, LISA B. E. SHIELDS, ROSS REICHARD, AND STEVEN GOUDY Drowning Without Aspiration: Is This an Appropriate Diagnosis?—JEROME H. MONIQUE BELLEFLEUR, AND JOSEPH H. DAVIS	1111 1114 1119
Estimating Time of Death of Deer in Missouri; A Comparison of Three Indicators—BRADLEY M. HADLEY, LYNN W. ROBBINS, AND DAVID A. BEFFA	1124
Comparative Studies on Tissue Distributions of Organophosphorus, Carbamate and Organochlorine Pesticides in Decedents Intoxicated with These Chemicals—Fumio Moriya and Yoshiaki Hashimoto An Evaluation of the Significance of Transfers of Debris: Criteria for Association and Exclusion—Chesterence Cwiklik Infrared Spectra of U.S. Automobile Original Topcoats (1974-1989): VI. Identification and Analysis of Yellow Organic Automotive Paint Pigments—Isoindolinone Yellow 3R, Isoindoline Yellow, Anthrapyrimidine Yellow, and	1131 1136
Miscellaneous Yellows—EDWARD M. SUZUKI Long PCR for VNTR Analysis—kristy L. Richie, Mindy D. Goldsborough, Marlene M. Darfler, Elizabeth A. Benzinger, Melissa L. Lovekamp, Dennis J. Reeder, and Catherine D. O'Connell Comparative Identity and Homogeneity Testing of the mtDNA HV1 Region Using Denaturing Gradient Gel Electrophoresis—Robert J. Steighner, Lois A. Tully, Justin D. Karjala, Mike D. Coble, and Mitchell M. Holland The Fitness of Juvenile Court—Bruce H. Gross	1151 1176 1186 1199
Analysis of Ballpoint Pen Inks by Field Desorption Mass Spectrometry—masataka sakayanagi, jun komuro, yaeko konda, kunio watanabe, and yoshihiro harigaya	1204
Technical Notes	
A Reevaluation of the Sex Prediction Accuracy of the Minimum Supero-Inferior Femoral Neck Diameter for Modern Individuals—Christopher M. Stojanowski and Ryan M. Seidemann Presenting Three-Dimensional Forensic Facial Simulations on the Internet Using VRML—Martin P. Evison and MICHAEL A. GREEN Interpolating Between Computerized Three-Dimensional Forensic Facial Simulations—MICHAEL A. GREEN AND MARTIN P. EVISON Validation of the Use of a Commercially Available Kit for the Identification of Prostate Specific Antigen (PSA) in Semen Stains—John P. SIMICH, SHANNON L. MORRIS, ROBERT L. KLICK, AND KATE RITTENHOUSE-DIAKUN Detection of Epithelial Cells in Dried Blood Stains by Reverse Transcriptase-Polymerase Chain Reaction—Martin Bauer, Alexandra Kraus, and dieter Patzelt	1215 1219 1224 1229 1232
Application of Solid-Phase Microextraction to the Profiling of an Illicit Drug: Manufacturing Impurities in Illicit 4- Methoxyamphetamine—John C. Coumbaros, K. Paul Kirkbride, and Gunter Klass TWGDAM Validation of a Nine-Locus and a Four-Locus Fluorescent STR Multiplex System—Katherine A. Micka, ELIZABETH A. AMIOTT, TARA L. HOCKENBERRY, CYNTHIA J. SPRECHER, ANN M. LINS, DAWN R. RABBACH, JENNIFER A. TAYLOR, JEFFERY W. BACHER, DEBRA E. GLIDEWELL, SANDRA D. GIBSON, CECELIA A. CROUSE, AND JAMES W. SCHUMM	1237 1237
Data on the PCR Turkish Population Based Loci: LDLR, GYPA, HBGG, D7S8, and Gc—melahat kurtuluş ülküer, üner ülküer, tahsin kesici, and adnan menevşe	1258
Population Study of HUMTH01, HUMVWA31/A, HUMF13A1, and HUMFES/FPS Systems in Azores— FRANCISCO CORTE-REAL, LUÍS SOUTO, M. J. ANJOS, MÓNICA CARVALHO, DUARTE N. VIEIRA, ANGEL CARRACEDO, AND M. C. VIDE Allele Frequencies of Six STR Loci in Argentine Populations—NOELIA TOURRET, JORGE LÓPEZ CAMELO, AND LIDIA VIDAL-RIOJA	1261 1265
A Systematic Analysis of Secondary DNA Transfer—CARLL LADD, MICHAEL S. ADAMOWICZ, MICHAEL T. BOURKE, CAROL A. SCHERCZINGER, AND HENRY C. LEE	1270
Frequencies of D8S384 Alleles and Genotypes in European, African-American, Chinese, and Japanese Populations— H. Y. MENG, Y. P. HOU, G. D. CHEN, Y. B. LI, J. WU, H. WALTER, AND M. PRINZ Population Data on the Thirteen CODIS Core Short Tandem Repeat Loci in African-Americans, U.S. Caucasians, Hispanics,	1273
Bahamians, Jamaicans, and Trinidadians—bruce budowle, tamyra r. moretti, anne l. baumstark, debra a. defenbaugh, and kathleen m. keys	1277

1110 JOURNAL OF FORENSIC SCIENCES

Preserving the Integrity of the Interview: The Value of Videotape—steven E. PITT, ERIN M. SPIERS, PARK E. DIETZ, AND JOEL A. DVOSKIN Alcohol Content of Beer and Malt Beverages: Forensic Considerations—BARRY K. LOGAN, GLENN A. CASE, AND SANDRA DISTEFANO	1287 1292
Case Reports	
Positive Identification of Cremains Recovered from an Automobile Based on Presence of an Internal Fixation Device— JOANNE L. BENNETT AND DEREK C. BENEDIX Fulminant Liver Failure in a Young Child Following Repeated Acetaminophen Overdosing—MARTIN BAUER. BERNWARD BABEL, HEINRICH GIESEN, AND DIETER PATZELT Traumatic Rupture of an Abdominal Aortic Aneurysm Associated with the Use of a Seatbelt—YASUO BUNAI, ATSUSHI NAGAI. ISAO NAKAMURA, AND ISAO OHYA A Case of Suicidal Hanging Staged as Homicide—THOMAS W. ADAIR AND MICHAEL J. DOBERSEN Detection of Azide in Forensic Samples by Capillary Electrophoresis—GLEN L. HORTIN, SUSANTA K. DEY, MARILYN HALL, AND C. ANDREW ROBINSON JR.	1296 1299 1304 1307 1310
Brief Communication	
Distribution of D1S80 Alleles in the Bahrainian Population—mohammad A. Tahir, Carol Rogers, Mohammed Alkhayyat, Mona el-Gohary, Bruce Budowle, and Kuppareddi Balamurugan	1314
For the Record	
Allele Frequencies for Nine STR Loci in African-American, Chinese, Vietnamese, and Bangladesh Populations—s. Borys. A. EISENBERG, G. CARMODY, AND R. FOURNEY Allele Frequency Distributions for Nine STR Loci in the Japanese Population—s. Borys, R. IWAMOTO, J. MIYAKOSHI. G. CARMODY, AND R. FOURNEY Allele Frequency in the Population of Buenos Aires (Argentina) Using AmpliType® PM+ DQA1—R. A. PADULA. D. A. GANGITANO, G. J. JUVENAL, AND B. BUDOWLE	1316 1319 1320
Correspondence	
Commentary on Tomczak PD, Buikstra JE. Analysis of Blunt Trauma Injuries: Vertical Deceleration Versus Horizontal Deceleration Injuries. J Forensic Sci 1999;44(2):253–262—ALISON GALLOWAY AND RICHARD T. MASON Authors' Response—PAULA D. TOMCZAK AND JANE E. BUIKSTRA Commentary on Introna F, Di Vella G, Campobasso CP, Determination of Postmortem Interval from Old Skeletal Remains by Image Analysis of Luminol Test Results. J Forensic Sci 1999;44(3):535–538—GEORGE J. SCHIRO, JR. Authors' Response—FRANCESCO INTRONA, JR., ET AL. Commentary on Hochmeister MN, Budowle B, Sparkes R, Rudin O, Gehrig C, Thali M, Schmidt L, Cordier A. Validation Studies of an Immunochromatographic 1-Step Test for the Forensic Identification of Human Blood. J Forensic Sci 1999;44:597–602—BARBARA O. ROWLEY Authors' Response—MANFRED HOCHMEISTER Commentary on Koons RD, Buscaglia J. The Forensic Significance of Glass Composition and Refractive Index Measurements. J Forensic Sci 1999;44(3):496–503—JAMES M. CURRAN, JOHN S. BUCKLETON, AND CHRISTOPHER M. TRIGGS Authors' Response—ROBERT D. KOONS AND JOANN BUSCAGLIA Commentary on Linch CA, Smith SL, Prahlow JA. Evaluation of the Human Hair Root for DNA Typing Subsequent to Microscopic Comparison. J Forensic Sci 1998;43(2):305–314—MARK J. PETTENATI AND P. NAGESH RAO Authors' Response—CHARLES A. LINCH AND JOSEPH A. PRAHLOW Commentary on Willey P and Scott DD, Who's Buried in Custer's Grave? J Forensic Sci 1999;44(3):656–665— NORMAN D. SPERBER Authors' Response—P. WILLEY AND DOUGLAS D. SCOTT Partisan Expert Witness Testimony—EMANUEL TANEY	1321 1322 1322 1322 1323 1324 1324 1326 1329 1329 1330 1330 1331
Book Reviews	
Review of <i>The Litigator's Guide to Expert Witnesses</i> —EMANUEL TANAY Review of <i>Marihuana and Medicine</i> —LEO UZYCH Review of <i>Principles of Forensic Toxicology</i> —CHARLES L. WINEK	1333 1334 1335
Editorial Communication—ROBERT E. GAENSSLEN	1336
Index to Volume 44	1341
Undated Information for Authors	1377

TECHNICAL NOTE

Steven E. Pitt, D.O.; Erin M. Spiers, M.A.; Park E. Dietz, M.D., M.P.H., Ph.D.; and Joel A. Dvoskin, Ph.D., A.B.P.P.

Preserving the Integrity of the Interview: The Value of Videotape

REFERENCE: Pitt SE, Spiers EM, Dietz PE, Dvoskin JA. Preserving the integrity of the interview: The value of videotape. J Forensic Sci 1999;44(6):1287–1291.

ABSTRACT: This article addresses the value of videotape in forensic mental health evaluations. Literature reviews were conducted using Medline and PsychInfo Databases. The authors briefly describe the general use of videotape, explore the use of videotape within the legal process, respond to opposition to videotape use, discuss confidentiality and consent issues, address possible exceptions to the use of videotape, and express their unwavering support for the use of videotape during forensic evaluations. The authors also provide a detailed set of instructions designed to assist professionals with establishing their own videotaping system. The authors conclude that videotape performs an essential function in the preservation of the integrity of forensic mental health evaluations.

KEYWORDS: forensic science, forensic psychiatry, forensic psychology, videotape, videotaping evaluations

The American Academy of Psychiatry and the Law (AAPL) recently completed a task force report regarding the use of videotape during forensic psychiatric evaluations (1). The task force evaluated the costs and benefits of videotape, discussed clinical and ethical issues germane to using videotape, and initiated the development of a uniform standard of practice for the use of videotape.

The AAPL task force concluded that, given the current state of research, a blanket endorsement of the use of videotape during forensic psychiatric evaluations is premature. The panel did, however, recognize that videotaping forensic psychiatric evaluations is a medically ethical practice. Moreover, several of the benefits of videotape are cited within their report.

In this article, we briefly describe the general use of videotape, explore the use of videotape within the legal process, respond to opposition to videotape use, discuss confidentiality and consent issues, address possible exceptions to the use of videotape, and express our unwavering support for the use of videotape during forensic evaluations. We also provide a detailed set of instructions designed to assist professionals with establishing their own videotaping system.

Universal Applications

The use of audio and videotape to optimize education is a well established practice. Recorded materials have utility in disseminating information and have long been used in the behavioral sciences for research, documentation, professional training and public education (2). Behavioral scientists have made use of this medium for evaluating their own performance and highlighting areas in need of improvement in their interview styles and techniques. Furthermore, some therapists have used videotape as a means of enhancing patients' self-awareness and introspection (2).

Widespread use of videotape has proved invaluable in such diverse areas as scientific research, enhancing reports and presentations, and providing feedback during performance training. Despite the breadth of its availability, utility, and acceptance, the authors contend that videotape is underutilized by forensic mental health evaluators.

Videotape and the Legal Process

The courts have become increasingly amenable to the use of videotaped testimony during legal proceedings. Such testimony is widely used in the context of custody and child abuse cases. The use of videotape with children served initially to protect children from unnecessary, repeated interviews. According to the American Academy of Child and Adolescent Psychiatry, the benefits of videotape include the verbatim preservation of children's initial statements, the reduction of instances in which children are forced to testify repeatedly, the presentation of videotape testimony to a grand jury, and the educational use of videotape to improve interviewer skills (3).

While the use of videotape began in the legal profession with the investigation and prosecution of child sexual abuse, its application has been far reaching. Videotape has been successfully employed in a myriad of settings in which accurate preservation of evidence

¹ Clinical Associate Professor, Department of Psychiatry, The University of Arizona Health Sciences Center, Phoenix, Arizona.

² Doctoral student of clinical psychology, Arizona School of Professional Psychology, Phoenix, Arizona.

³ Clinical Professor of Psychiatry and Biobehavioral Sciences, UCLA School of Medicine; President, Park Dietz & Associates, Inc., Newport Beach, CA

⁴ Clinical Assistant Professor, Department of Psychiatry, The University of Arizona Health Sciences Center. Adjunct Assistant Professor, The University of Arizona College of Law, Tucson, Arizona.

Received 22 Jan. 1999; and in revised form 1 March 1999; accepted 11 March 1999.

is valued by the legal system. The ability to capture and retain an accurate audio-visual record is an invaluable tool in law enforcement interviews, depositions, grand jury testimony, crime scene analysis, autopsies, and forensic mental health interviews.

Legal issues surrounding the use of videotape in forensic psychiatric settings have been examined by both state and federal court systems (1). Thus far, it has been concluded that an interviewer is neither required to use nor prohibited from using videotape during his or her interview (1). Furthermore, the interviewer is not required to provide a formal Miranda warning to the interviewee (1). The interviewer should, however, at the onset of the interview, provide a comprehensive description of the limits of confidentiality and attempt to obtain the subject's consent or assent, depending upon the context of the particular interview.

As courts become more accustomed to the use of videotaped interviews, it will be necessary for mental health professionals to enhance their standard of practice to keep pace with the expectations of lawyers, judges, and jurors.

Confidentiality and Consent

The use of videotape for forensic mental health interviews is accompanied by specific professional issues and concerns. In preparing this paper, the authors requested information from the American Psychiatric Association, American Academy of Psychiatry and the Law, American Psychological Association, American College of Forensic Psychiatry, American Board of Forensic Psychology, the Psychiatry and Behavioral Science Section of the American Academy of Forensic Sciences, and the American College of Forensic Examiners.

With the exception of the AAPL task force report, none of the aforementioned associations has issued a policy statement or guideline about the use of videotape. However, the American Psychological Association referred the authors to the Division 41 specialty guidelines of the American Psychology-Law Society. The American Psychiatric Association, American College of Forensic Psychiatry, and American College of Forensic Psychology, each referred the authors to ethical guidelines regarding confidentiality and informed consent.

According to the AAPL ethical guidelines, "the psychiatrist maintains confidentiality to the extent possible given the legal context . . . An evaluation for forensic purposes begins with notice to the evaluee of any limitations on confidentiality." (4) Prior to the onset of any videotaped interview, it is incumbent upon the examiner to provide the interviewee with a detailed description of both the limits of confidentiality and the purpose of the evaluation. It is also wise to have the interviewee sign an informed consent document that eliminates his or her uncertainty about the limits of confidentiality, and to repeat the limits of confidentiality and purpose of the interview after taping has begun. Furthermore, the subject must be informed (preferably on tape) of all recording devices and the nature and potential use of the work product following the interview. It is also necessary to obtain consent (or assent) for the interview from either the individual or the agency acting on the subject's behalf. With respect to consent, AAPL ethical guidelines state, "Where consent is not required, notice is given to the evaluee of the nature of the evaluation. If the evaluee is not competent to give consent, substituted consent is obtained in accordance with the laws of the jurisdiction (4)."

Furthermore, prior to the onset of any forensic psychiatric evaluation, it is important to remind the subject that while the evaluator is a mental health professional, his or her current function is not in the role treating clinician. One should be mindful of a subject's limited understanding of this distinction (4).

Response to Opposition

Five principal objections have been raised to the use of videotape in forensic mental health evaluations. We address each of these in turn.

Third Party Presence—Attorneys will frequently argue that their presence, or that of a representative acting on their behalf, is necessary during a forensic evaluation. This contention is often held to be based on the desire to ensure their client's constitutional rights and to verify the accuracy of future accounts of the interview (5). Additionally, attorneys may express concern about the accuracy of a psychiatrist's recollection and interpretation of nonverbal behaviors observable during a psychiatric evaluation. An attorney may also wish to observe the process in order to guarantee that the level of professionalism on behalf of the psychiatrist is not compromised at any time during the interview. The courts have not uniformly upheld a right of a defendant to have counsel present during a forensic psychiatric evaluation. In fact, in Estelle v. Smith, the U.S. Supreme Court found that "an attorney present during the psychiatric interview could contribute little and might seriously disrupt the examination (6)." In some cases, however, it has been held that the defendant may request videotape (1).

Videotape allows for the preservation of a precise account of an evaluation. The use of a videotape system with cameras positioned to face both the examiner and subject negates possible allegations of impropriety. Using a dual camera design, all behavior, interviewer and interviewee alike, may be accounted for without compromising the interview. Videotape addresses the need for verified accuracy without the disruptive effect of the presence of an attorney.

An additional advantage of videotape speaks directly to complications which may arise from an attorney's presence during an examination. The attorney who attends a forensic evaluation may potentially be compelled to testify regarding the interview he or she observed. Videotaping provides counsel with an explicit account of the interview while negating the perceived need for his or her attendance. To this end, the use of videotape precludes the possibility that an attorney may be forced to withdraw as counsel under the attorney-witness rule.

In addition, it prevents the attorney from influencing the interview in an undiscoverable manner. For example, one of the authors participated in a case that involved a defendant charged with kidnapping and sexual assault. The defendant alleged that the offenses were committed by an "alter" personality. A videotaped interview, conducted by a defense-retained psychologist and psychiatrist, was attended by defense counsel. As the interview progressed, the "alter" personality was interviewed by the aforementioned experts and defense counsel. During a review of the same videotape, prosecution-retained experts determined that the defendant was malingering.

Interviewer-Interviewee Relationship—A common argument used to dispute the use of videotape in a clinical psychiatric setting is that such devices may interfere with the establishment of therapeutic rapport (5). This concern surrounds the patient's lack of trust, which is thought to result in a lack of openness during the interview.

In the case of the forensic interview, however, the professional is striving to evaluate and assess rather than to treat. The subjects,

therefore, remain litigants rather than patients (7). Indeed, as Dietz points out, "The most fundamental distinction between clinical and forensic psychiatry is the absence of a doctor-patient relationship in the latter (8)." The purpose of the interview is primarily investigative, i.e., examining and presenting evidence regarding the litigant's behavior. It is therefore incumbent upon the professional to develop an interview style most conducive to accurate reporting by the subject without exploiting therapeutic rapport.

Videotape Tampering—Opposition to the use of videotape on the basis of susceptibility to tampering is simply without merit. Videotape tampering, such as pauses or breaks, can be readily identified by laypersons lacking any special technical training. However, should a concern be raised with regard to the integrity of a particular tape, experts are available to assess the material for flaws (7). It is possible, though unnecessary, to further protect against tampering by simultaneously producing duplicate copies with a time code, which creates a daunting obstacle to any party who may attempt to alter a videotaped interview.

Professional Liability—Resistence to the uniform use of videotape also arises from the concern of some evaluators regarding their own professional liability. Although there may be evaluators who have something to hide, we regard this as another argument in favor of videotape. The likelihood that one's work will be examined within a legal context is inherent in forensic psychiatry. The forensic professional must never be fearful of having his or her own work product preserved and scrutinized. Those who seek to avoid having their work product openly reviewed raise questions regarding the manner in which their work is conducted.

For example, one of the authors was retained as a prosecution witness in a case involving a serial rapist who alleged that, during the commission of the offenses, he suffered from a Dissociative Identity Disorder. A defense-retained psychologist met with the defendant on multiple occasions; however, only a select number of interviews were videotaped. The defense expert's videotaped interviews were noteworthy for leading questions, the repeated use of profane language and the absence of a time code, all of which called into question the professionalism of the interviewer.

Professionals who are mindful and conscientious will be able to embrace the advantages of videotape without reservations about liability. In fact, videotape may serve a protective function in the face of inquiry regarding an interviewer's conduct during an evaluation. An example of the protective nature of videotape is demonstrated by a toxic tort case in which one of the authors was retained as a defense expert. In addition to claiming emotional damages, the plaintiff alleged that her injuries led to a restriction in the range of motion of her upper extremities. On direct examination, the plaintiff alleged that during the independent psychiatric evaluation (which was attended by an associate of plaintiff's counsel), the examiner berated her and engaged in hostile dialogue. During the author's direct testimony, the veracity of the plaintiff's allegations was refuted through videotaped documentation of the interview which was viewed in its entirety by the jury. The production of a videotaped record allowed the jurors to see that the plaintiff had unlimited use of her upper extremities and prevaricated about what had taken place during the examination.

Heightened Workload—The potential for extensive and timeconsuming review has been cited as an additional concern surrounding the use of videotape in forensic psychiatry (1). The opposing expert, through discovery, may have the opportunity to examine the videotaped psychiatric interview. Subsequently, he or she may elect to videotape his or her own interview, necessitating the labor-intensive review of tapes from each side. Such comprehensive review in turn creates a scenario in which the expert may be subject to a more rigorous cross-examination (1).

The use of videotape may indeed facilitate the need for additional time allotted to review taped interviews. It additionally may heighten the intensity of potential cross-examination one may encounter. These arguments, however, are lacking in both weight and integrity. The nature of the field is such that meticulous preparation for report writing, testimony, and cross-examination are the cornerstones of our profession. The use of a tool that allows for superior preparation of an expert witness must never be discarded out of concern for a heightened workload.

In his text, The Psychiatrist as Expert Witness, Gutheil strongly recommends opposing both the presence of counsel and/or videotape during the interview, citing (with respect to videotape) the potential for distraction of the interviewer and opportunistic responses by the interviewee (9). Guthiel holds that "under rare circumstances, an audiotape or videotape of an interview may be constructive; it is certainly beneficial for teaching and for self-review for quality assurance. Verbatim material also can be obtained this way. However, unobtrusive note taking probably represents the optimum compromise among choices."

It is our position that videotape is the optimum choice for the forensic interview. The ability to capture a subject's unique image and verbalizations on videotape unequivocally enhances the caliber of the evaluation and report. In our experience, the use of videotape does not serve as a distraction, nor does it result in response bias. We do not dispute the benefits of note-taking, however, videotape allows for intricacies unavailable to audiotape or note taking alone, such as subsequent examinations of nonverbal behavior, appropriateness of affect, and changes in affect during successive interviews. It also eliminates the possibility of intentional or unintentional bias in the selection of what is documented by the note-taker. To this end, videotape is an unparalleled instrument for preserving the integrity of a forensic psychiatric interview.

The importance of preserving subtle aspects of an interview is demonstrated in a case in which one of the authors was retained to examine a defendant charged with the double murder of an elderly couple. Both victims' throats had been cut with a bowie knife. At the onset of the independent psychiatric examination, the defendant was vague and evasive, providing monosyllabic responses to the interviewer's questions. However, the defendant, a knife enthusiast, demonstrated a marked change in his demeanor after being provided with an illustrated catalog of knives. He spoke at length with the examiner about his knowledge of the various knives depicted in the text. He described his familiarity with the different knives and kniferelated products. In addition to significantly increasing his verbal dialogue, the defendant's affect became more animated and his rapport with the examiner improved. Videotape provided a comprehensive documentation of the totality of the defendant's demeanor.

The Establishment and Use of a Videotape System

When incorporating videotape into a forensic psychiatric practice, the professional should be mindful of the audience(s) who may ultimately view their work product. In addition to preserving the integrity of the interview, he or she is creating a legal document that may be introduced into a court of law. Consequently, the interviewer should make a concerted effort to use equipment that ensures an accurate record of the proceedings.

The AAPL task force cites standards that attorneys are obligated to demonstrate prior to submitting a videotape into legal proceedings (1). These standards address several factors that focus on the production and utility of videotape. It is essential that forensic professionals be aware of and comply with such standards. This includes making certain that the videotape functions properly, the tape is authentic, the tape has not been altered, the film has been properly maintained, the tape is clear and is in no way unintelligible or misleading, and that any confessions contained within the tape were not coerced.

The integration of videotape into professional practice need not be an intimidating or arduous process. When developing a videotaping system, Dowrick contends that equipment should be selected to simply meet one's individual needs rather than succumbing to the temptation of an elaborate, overly complicated system (2). The authors agree that complexity should not be mistaken for usefulness when purchasing video products. The use of industrial videotape equipment is recommended as this equipment is durable and reasonably priced. Certain features must be included in order to create an appropriate record of any interview.

The ideal office-based videotaping system uses two cameras in the interview area. One camera should be either mounted or on a tripod behind the interviewee, and thus focused on the interviewer, while a second camera should be either mounted or on a tripod behind the interviewer and focused on the subject. The pictures are then fed into the same monitor in order to produce a picture-in-picture format or a split-screen format. This dual-camera design thwarts challenges about the non-verbal interactions between the interviewer and the interviewee.

The video monitor ensures accurate positioning of camera equipment and makes certain that both parties are appropriately captured on the videotape. In addition, the monitor allows the professional to review the end product. Notwithstanding the utility of a monitor, having the monitor operating during an evaluation serves as a distraction to the interview process. It is, therefore, recommended that if the monitor is located in the interview room, it remains off during the course of the interview. With the agreement of the interviewee's attorney, the monitor may be attended by a technician responsible for the videotaping.

Appropriate lighting is another factor that must be considered during the videotaping process. It is important that shadows and other obstacles be avoided. Positioning subjects according to light sources and windows is important for the reproduction of clear, precise images on tape. Lights must be set in a manner most conducive to the creation of an accurate picture. It is helpful if the camera is equipped with a manual iris to allow the user to determine the overall exposure (2).

Another important consideration is inclusion of a date and time code. We have found it extremely beneficial to have a running time code that captures the date the interview is conducted as well as a real time clock. The date and time code provides an added measure of accuracy and professionalism and can be exceedingly useful after a transcript of the interview is produced. Furthermore, this precaution protects against tampering with the videotape.

Gardner advises the use of equipment that allows for the simultaneous production of three master tapes as opposed to making one master followed by subsequent dubbings (7). The authors agree with this procedure. Often, one will be required to provide copies of the interview to multiple parties associated with a particular case. With analog equipment, subsequent dubs deteriorate with each generation and may result in one or more of the participants receiving an uneven work product. Moreover, the concurrent pro-

duction and distribution of three tapes helps to deter any party from tampering with the individual copy that he or she has received.

Appropriate sound amplification is critical and must allow for an accurate audiotaped recording. Frequently, built-in audio recording equipment used with hand held recreational video machines is vulnerable to audio feedback and a disproportionate volume of ambient sounds in close proximity to the camera. To this end, it is worthwhile to invest in a high quality omnidirectional microphone, or to equip each participant with their own microphone, so as to ensure that the sound is of excellent quality.

In addition to a comprehensive videotaping system, a backup audiotape recording should be made to preserve a separate and distinct audio account of the interview. The audiotape not only maintains the audio record, but is essential if one plans to have a transcript made of the interview. It is highly ineffective and time-consuming for a transcriptionist to use the videotape as his or her primary source for preparing a transcript. Rather, it is far more productive to use an audiotape as the mechanism by which all transcripts are made.

Thoughtful selection of the type of audiotapes and videotapes used will add to the quality of the recording. We have found that videotapes should run no longer than 120 min, and the audiotapes should allow for 60 min of recording per side, for a total of 120 min per tape. The use of 120 min audiotapes and videotapes allows the interviewer to routinely change both audiotape and videotape at 2 h intervals. This is most effectively achieved when your audiotape player has an auto-reverse function that allows for audiotape recording on both sides of the tape without having to manually turn over the tape. We discourage the use of extended play videotapes, as the quality of these tapes is frequently inferior to standard VHS products, and the lack of coordination between audio and video recording may result in unnecessary confusion or distraction.

Storage of video and audiotapes is no more cumbersome than storing written records. Videotapes are roughly one inch in width and seven inches in length, therefore, two tapes placed adjacent to one another require no more space than an inch thick stack of standard paper. Audiotapes, which are substantially smaller, take up even less space.

In addition to establishing a comprehensive office-based video system, the professional may need portable equipment. When interviewing individuals housed in correctional settings or psychiatric facilities, the evaluator may be required to perform the evaluation on-site. Portable equipment will usually be less elaborate than a stationary system. However, one must make every effort to ensure that the work product remains of superior quality. The portable system must include a video camera and a tripod. Again, it is essential that the video camera be equipped with a date and time code. As previously discussed, all videotape should be supplemented with an audio backup to facilitate transcription. When conducting an on-site evaluation, the interviewer should position the camera so as to capture the images of both parties on screen. This is usually best achieved by placing the camera to the side, thus providing a profile view of both interviewer and interviewee. It is of particular importance that one use only the highest quality videotape in conducting evaluations of this nature. As simultaneous production of duplicates is likely not possible, quality videotape will minimize distortion on subsequent dubbings.

Exceptions to the Use of Videotape

Institutional policies and financial constraints may make videotaping each and every forensic evaluation impractical. In these cases, every effort should be made to audiotape the evaluation, thereby preserving the integrity of the spoken word. Furthermore, there are rare occasions whereby a stationary videotaping system may be unable to capture an evaluee who cannot sit still.

The authors also recognize that the development and implementation of a comprehensive videotaping system may present a financial hardship for part-time practitioners or for professionals in the early stages of their practice. One way to overcome this obstacle is for forensic mental health professionals to share the cost of equipment. As videotaping equipment becomes increasingly affordable, we believe that more and more forensic evaluations will be, and should be, videotaped.

Even professionals who videotape their forensic evaluations will come across certain situations when the cost of videotaping may not be justified by the nature of the evaluation (e.g., pre-sentence reports, social security disability evaluations). In such cases, forensic mental health professionals must assess the effect that forgoing a videotaped evaluation will have on their work product.

Conclusion

The use of videotape during forensic mental health evaluations is advantageous for all parties who have an interest in seeking the truth. Videotape permits the preservation of data in order for all subsequent evaluators to have access to equivalent material. Furthermore, it allows for the identification of any instances in which interviewers asked leading questions, implanted ideas or symptoms, or otherwise shaped the evidence. Videotape further provides a verbatim record so evaluators needn't rely on memory or notetaking ability to faithfully capture the exact language that is so often the most important finding in a forensic psychiatric interview. The use of videotape encourages evaluators to conduct interviews of a quality that can withstand scrutiny, while concurrently protecting evaluators against unfounded claims of impropriety, all without introducing a third person into the interview room. Videotaped evaluations additionally protect the attorney, who may have otherwise wished to attend an evaluation, from being called as a witness.

The AAPL Task Force concluded that, given the current state of research available, it was unable to provide a blanket recommendation regarding the use of videotape in forensic psychiatry (1). The Task Force did, however, determine that videotaping of interviews is an ethically acceptable medical practice. Furthermore, it is recognized that other legal and professional sources (e.g., statutes, case law, and practice guidelines) may require or recommend videotaping in certain circumstances. It was recommended that all forensic training programs consider the educational use of videotaping forensic interviews.

According to Dietz, "Some of the consumers of forensic psychiatric services are poorly equipped or unmotivated to distinguish among mediocrity, proficiency, and excellence" (10). The authors believe that through the use of videotape in forensic interviews, one is able to bridge the gap between proficiency and excellence in his or her own practice. Videotape performs an essential function in preserving the integrity of forensic interviews. No other medium allows for the complete and accurate recording of data that a videotape provides.

References

- 1. American Academy of Psychiatry and the Law. AAPL task force. Videotaping of forensic psychiatric evaluations. J Am Acad Psychiatry Law. 1999;27(2):345-358.
- 2. Dowrick PW. Practical guide to using videotape in the behavioral sciences. New York: John Wiley & Sons, Inc.; 1991.
- 3. American Academy of Child and Adolescent Psychiatry. Guidelines for the clinical evaluation of child and adolescent sexual abuse. 1988.
- 4. American Academy of Psychiatry and the Law. Ethical guidelines for the practice of forensic psychiatry. Adopted May, 1987; last revised 1995.
- 5. Goldstein RL. Consequences of surveillance of the forensic psychiatric examination: an overview. Am J Psychiatry 1988;145(10):1243-7.
- 6. Estelle v Smith, 451 US 454, 470.
- 7. Gardner RA. Testifying in court: a guide for mental health professionals. Cresskill, NJ: Creative Therapeutics, Inc.; 1995.
- 8. Dietz PE. The quest for excellence in forensic psychiatry. Bull Am Acad Psychiat Law 1996;24(2):153-63.
- Gutheil TG. The psychiatrist as expert witness. Washington D.C., American Psychiatric Press; 1998.
- 10. Dietz PE. The forensic psychiatrist of the future. Bull Am Acad Psychiat Law 1987;15(3):217-27.

Additional information and reprint requests: Steven E. Pitt, D.O. 11801 N. Tatum Blvd.

Suite 103

Phoenix, AZ 85028