Baccreditation Relationship Testing News

May 2017

Volume 12, Number 1



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Do you have an interesting case or question you would like to share? Email us at nikkib@aabb.org

Perinatal Abductions and Parentage Testing

Robert E. Wenk MD, MS

Kidnapping As A Crime

Worldwide, motives for the crime of kidnapping include payment, slavery, religious conversion and sale to couples who are infertile or who have lost a child. Outside the U.S., kidnapping remains a common crime. In the U.S., only a thousand kidnappings of children occur each year. The kidnappers are usually spouses seeking vengeance. Kidnappers unrelated to their victims abduct and ransom only a dozen victims per year.

Perinatal Kidnapping

Motives for kidnapping differ when a child is taken around the time of birth. The biblical story of King Solomon features a female kidnapper who replaced her own dead newborn with that of another woman. Threatening to cut the living child in half, Solomon deduces the biologic mother by her willingness to give the child to the kidnapper. Solomon's wisdom aside, the apocryphal tale has its roots in reality.

Perinatal kidnapping is not simply a crime. It differs qualitatively from other abductions: First, whereas the kidnappers of older children and adults are men, the abductors of infants are usually women; Second, the motive is to obtain and raise a child for reasons of infertility or loss; and third, the kidnapper often experiences symptoms of pregnancy and develops ritualistic behavior associated with gestation and obstetrical delivery. This year, police found Kamiyah Mobley who had been abducted 18 years ago, immediately after her birth in Florida. Her kidnapper had escaped to South Carolina where she had raised the child. Questionable identification raised police suspicions, but parentage analysis with STR loci demonstrated Mobley's true identity. This kind of infant kidnapping is termed "baby snatching".

More bizarre, some perinatal kidnappings are called "fetal abductions". In these cases, a female perpetrator kidnaps a newborn child by befriending a pregnant woman and then intimidating the expectant mother, coercing her to undergo an induced vaginal delivery. The actual kidnapping occurs after birth of the child. Worst of all cases, some fetal abduction occurs after a surgical assault of the pregnant woman. The fetus is removed after attempted Cesarean section, vaginal extraction or murder.

A Case

My own experience has involved one proven case of "baby snatching". A married woman delivered a male child in a hospital. After one day of life, a woman pretending to be a nurse abducted the boy and escaped from the hospital.

The case occurred in 1989 when parentage tests included: blood groups, HLA haplotypes, electrophoretic types of biochemical loci and Southern blotting 2 VNTR loci. Police found the suspect when she attempted to register a "home birth" seven weeks after the kidnapping.

Exclusion of the kidnapper from maternity of the child used a 1parent test. Note that genetic inconsistencies were evident only in the three high-heterozygosity (Het. >90%) loci: HLA, YNH24, TBQ7. (See the table.)

The victimized parents of the kidnapped child underwent parentage tests too. To avoid any potential problem of finding nonpaternity of the husband of the couple whose child was abducted, single-parent paternity and maternity tests were carried out. Both revealed parentage indices of over 1000:1 for each parent. Table 1. Genetic Test Results of Kidnapped Child, Suspect, Alleged Mother & Father.

LOCUS	CHILD	SUSPECT	WIFE	HUSBAND Incons	sistency?
ABO	А	0	А	0	No
MNS	MNSs	Ms	MNSs	Ns	No
RH	cDe	cDe	cDe	cDEe	No
KEL	K1-	K1-	K1-	K1-	No
FY	a-b-	a-b-	a-b-	a-b-	No
JK	a+b+	a+b+	a+b+	a+b-	No
HLA-A	2,3	30	2,3	2,3	Indirect*
HLA-B	18,53	18,53	53	18,45	No
HLA-C	4	4	4	blank	No
GC	1F	1F	1F,A1	1F	No
ESD	1	1	1	1	No
TF	C1	C1	C1	C1	No
PGM1	1+	1+,2+	1+	1+,2+	No
YNH24	3.83, 2.46	2.06, 1.78	2.46, 1.40	3.83, 2.06	Direct*
TBQ7	4.95, 1.04	4.68, 2.52	4.84, 1.04	4.95, 1.43	Direct*

* Heterozygous: phenotype = genotype. Mono-allelic phenotypes = homozygous

genotypes.

The baby snatcher was a childless woman who posed as a nurse and removed the child from the hospital nursery. She had told a neighbor she was pregnant and had left for the hospital to deliver when she was in labor. The neighbor was convinced of the pregnancy, observing morning sickness, increased abdominal girth and labor pains. The neighbor claimed to have felt fetal movement and had observed galactorrhea and vaginal bleeding. After the kidnapping, the neighbor helped bury a "placenta" (goat entrails) in the backyard.

Pseudocyesis

Pseudocyesis ('false pregnancy') is common among baby snatchers and fetal abductors. It is a syndrome that consists of psychiatric and physiologic components. In pseudocyesis, an affected woman may experience galactorrhea, amenorrhea, nausea, increased girth and other signs and symptoms of pregnancy. In some cases, the condition is delusional and ritualistic, but in others there are objective somatic and endocrine changes. Hormone profiles are similar to those seen in polycystic ovary syndrome and depression. The syndrome occurs more frequently in women from third world nations. The behavioral and endocrine changes have been reported in numerous mammals (rabbits, rodents, pigs, snow leopards, etc.)

COMING SOON!!!

AABB and the American Association for Laboratory Accreditation (A2LA) have joined forces to offer the AABB/A2LA Accreditation Program to the relationship testing and forensics communities.

- Two assessments in one, covering AABB Relationship Testing Standards and ISO 17025:2005, reducing laboratory staff time
- An ISO standard that is not prescriptive and can be implemented based on your work culture and processes
- Internationally-recognized accreditation through ILAC (A2LA) and ISQUAa (AABB)
- Value-added assessments by quality-focused technical experts in the areas they are assessing resulting in an opportunity for all involved
- Partners in accreditation that will provide friendly, responsive staff to assist laboratories in navigating the accreditation landscape

On-Demand AABB eCast:

Incestuous Parentage and Its Analysis Available June 2017

Relationship Testing laboratories mostly perform paternity tests, but the police or social workers suspect that a previous incestuous union produced the child. A lab may be asked to provide objective laboratory evidence of incest. A common complication is that the alleged father cannot be tested. RT labs should be able to perform "fatherless" paternity tests and provide an "Incest Index", which demonstrates characteristic genotypes in a child of incest. This conference describes those genotypes and the calculations used in the Incest Index.

STAY TUNED FOR MORE INFORMATION

Available Now!

Standards for Relationship Testing Laboratories 12th edition *Print Only*

And

BUNDLE: Standards for Relationship Testing Laboratories 12th edition

Print and Portal

The effective date January 1, 2016

The Proposed 13th Edition of Standards for Relationship Testing Laboratories

The proposed 13th edition of *Standards for Relationship Testing Laboratories* is available for public comment from March 17, 2017 until May 17, 2017. A summary of significant changes is provided to facilitate review of the proposed Standards.

After the conclusion of the comment period, the Relationship Testing Standards Program Unit will meet to review all comments submitted. The 13th edition will go into effect on January 1, 2018.

To Comment on the Proposed Standards:

- 1. Submit comments by **May 17, 2017** through the online form. Users can also submit comments via email to standards@aabb.org.
- 2. Include name and postal address/fax number/email address, as appropriate.
- 3. Identify the standard by its number at the beginning of the comments. This identification is especially helpful if you comment on more than one standard.
- 4. Provide alternative wording if you think it would improve the clarity of a standard. If you agree or disagree strongly with a proposed change, please state your reasons or submit data.

Summary of Significant Changes and Proposed Standards for Relationship Testing Laboratories, 13th Edition (PDF)

Responses to Public Comments to the 12th edition of RT Standards are available.



New from AABB

Relationship Testing Collector Training and Certificate



Have you enrolled in AABB's relationship testing collector training?

This self-paced online course teaches individuals the proper methods to collect, process, and submit high quality DNA samples. Successful individuals will earn a Certificate of Training from AABB and be included on the list of qualified collection professionals given to AABB Accredited Relationship Testing laboratories nationwide.

LEARN MORE AND ENROLL TODAY! www.aabb.org/DNAcollector

For more information: Phone: +1.301.215.6482 • Email: professionaldevelopment@aabb.org

Registration Fees

December 23, 2015 – December 31, 2016: \$99 January 1, 2017 – June 30, 2017: \$59 July 1, 2017 – December 31, 2017: \$29

Find more information or to register, please visit the AABB RT Collector Training web page.

To obtain a FREE copy

The AABB Relationship Testing Annual Report Summary

GREAT RESOURCES

- Access FREE Recording of the previously held (Nov. 17th) audio conference titled Changes from the 11th Edition to the 12th Edition of Standards on YouTube.
- AABB has launched the 2nd Edition of the Collector Training certificate course for individuals who would like to be recognized as AABB-trained sample collectors for relationship testing purposes. Find more information visit the AABB RT Collector Training web page.

4 Available E-Cast: Human Chimera

Describes different kinds of chimera and mosaics, how natural chimera arise in an embryo and how human chimera are discovered and proven by genetic tests. Limitations in detection and testing are discussed and indicate why the frequency of chimerism is not easily determined. To purchase the Human Chimera E-Cast visit our Marketplace.

Misleading Claims of Accreditation and Logo Misuse

With the explosion of advertising on the internet, there has been increasing misuse of AABB's trademarked logos and misleading claims of AABB accreditation. We are renewing our efforts to stop such practices and are actively searching out these organizations so that we can address this problem on a more global scale. These efforts benefit accredited laboratories by preserving the strong value of AABB accreditation and by ensuring that customer attention is focused on laboratories that actually are accredited. Our facilities work hard to achieve and maintain accreditation and deserve the maximum benefit of that accreditation. Increased vigilance will also benefit laboratories' customers by ensuring that they get the accredited-laboratory test that they have paid for. You can aid these efforts by bringing to our attention instances of logo misuse or misleading statements regarding accreditation. Please advise AABB's Accreditation Department (accreditation@aabb.org) by providing the offending Web site and briefly describing the issue. It would be particularly helpful if you copy and email the actual link from your browser's address bar, as some offending organizations maintain multiple Web sites. The AABB Trademark Usage Guideline can found on the AABB Website.

WANTED

2016-2017 RTAPU Members

Robert Wenk, MD Chair

Marisol De Castro Reyes, MD Charles Kelly, PhD Michelle Beckwith, BS Harmeet Kaur, PhD Brandt Cassidy, PhD George Maha, JD, PhD John Peterson, PhD

2016-2017 RTSPU Members

George Maha, JD, PHD Chair

Mary Mount, MT(ASCP) Debra Davis, PhD Donna Housley, PhD Chris Miles Megan S. Mackenzie, PhD Zahra Mehdizadeh Kashi, PhD Robert Wenk, MD Kelly Beatty, MSFS Jane Pritchard, BS, MT(ASCP),CLSp(MB) Kaitlin Keating David Baumgraten Meghan Nemeth, JD

Audio Conference Content

Would you like to repurpose your old talks or presentations?

Share your content as part of AABB's 2016 RT Audio Conference Series.

Please let us know if you have given a talk or presentation in the last 2-3 years on a topic that you think may be of interest to the relationship testing community. Topics of interest may include but are not limited to calculations, new technologies, expert systems, court room basics, forensics, DNA etc. If you decide to submit your content, you can choose to moderate the audio conference or we can assign a speaker for you.

For more information or to submit your content, contact Nikki Bass at nikkib@aabb.org

Articles

Do you have an interesting case or question you would like to share through this newsletter? Or is there a topic or issue you would like us to write about? Email us at nikkib@aabb.org

RTAPU or RTSPU Member

- Are you interested in ensuring that assessment/audit procedures are in consistent with AABB policies established by the AABB Accreditation Program Committee?
- Are you interested in working with U.S. Citizenship and Immigration Service and/or the Dept. of State as it relates to RT?

If these issues are of interest to you, the **Relationship Testing Accreditation Program Unit** would like to have you as a member.

- Are you currently an AABB Member?
- Would you like to be involved in creating and revising the Relationship Testing Standards?
- Would you like to be involved in creating and revising the Guidance for the Standards?

If these issues are of interest to you, the **Relationship Testing Standards Program Unit** would like to have you as a member. To get involved, please contact Nikki Bass at the AABB National Office at nikkib@aabb.org.

Views expressed in this publication do not necessarily reflect official AABB policy and should not be relied on for legal advice.