

Ethical Concerns of Predictive Testing for Minors

Elizabeth (Betsy) Gettig, M.S., CGC
Graduate School of Public Health
University of Pittsburgh



Current Views

- There are generally no benefits to genetic carrier testing of minors, except when adolescents are contemplating marriage or having children in the near future.
- Risks of such testing include stigmatization, discrimination, and parental misunderstanding of the meaning of the test results.

Current Views

- Most commentators contend that the primary determinant of whether a child should undergo genetic testing is the best interests of the child.
- In the absence of a clear medical benefit to the child, these commentators opine that avoidance of potential testing-associated harms and the preservation of the minor's future autonomy should be the overriding considerations.

Current Views

- Accordingly, these commentators maintain that children generally should not undergo genetic testing for late-onset disorders in the absence of a medical benefit and should not undergo genetic carrier testing for recessive disorders.

Current Views

- Ambiguity exists for:
 - Childhood onset diseases where preventative or therapeutic measures are not available
 - Timing of testing for childhood-onset diseases
 - Age limit
 - Adolescents 15-18 yrs of age might be capable of making testing decisions instead of 18+

More Controversial?

- Predictive testing for minors may be more controversial than carrier testing in minors
- Not all guidelines distinguish between childhood-onset and adulthood-onset diseases
 - Greater need for clear recommendations
- Juvenile HD may complicate the ethical/clinical issues; however, in the presence of symptoms testing is recommended.

Goals of Genetic Testing

- Promote the well-being of the individual
- Family network of decision making
- Interest and ability to participate in decision making for his or her self

Goals of Counseling

- Parents and child understand:
 - Potential risk and benefits of the test
 - Decision-making capabilities of the child
 - Best interests of the child
- Only 20% of adults at risk for HD seek predictive testing

Impact of Risk/Benefit on Decision to Test

- **Primary justification is medical benefit to child**
- **Substantial psychosocial benefit**
- **Testing of late-onset diseases should be deferred**
- **Risk \neq Benefit**
- **Testing should be avoided when the risks outweigh the benefits**

Family Involvement in Testing

- Education and counseling demonstrates competency
- Obtain permission of parents, assent of child, or consent of adolescent to test
- Provider obligated to provide in the best interest of the child
- Requests for results by an adolescent is given priority over parents' request

Benefits/Harms to Testing Minors

- Medical Issues
 - Treatment/Prevention of disease
 - Surveillance for prognosis
 - Avoidance of harmful procedures
 - Clarification and refinement of prognosis

Benefits/Harms to Testing Minors

- Psychosocial issues
 - Reduction of uncertainty or anxiety
 - Alteration of self-image
 - Impact on family relationships
 - Impact on life planning

Benefits/Harms to Testing Minors

- Reproductive issues (in the future)
 - Prenatal diagnosis
 - Adoption
 - IVF/PGD
 - Donor egg or sperm

Promoting Family and Children Interests

- Parental authority
 - Roots of parental authority
 - Limits of parental authority
 - Legal trend to recognize authority of minors
- Decision-making capacity of children
 - Legal vs. moral/ethical

Promoting Family and Children Interests

- Provider's role in testing minors
 - Assessing requests for tests
 - Assessing requests for communication of results
 - Disclosure vs. Nondisclosure

References

- Adverse Effects of Predictive Testing for Huntington Disease Underestimated: Long-term Effects 7-10 years after the test. *Health Psychology*. 2004. **23(2)**: 189-197.
- Guidelines for molecular genetics predictive test in Huntington's Disease. *Neurology*. 1994. **44**: 1533-1536.
- Opinion: Predictive Testing for Huntington's Disease in Childhood: Challenges and Implications. *Am. J. Hum. Genet.* 1990. **46**: 1-4.
- Points to Consider: Ethical, Legal, and Psychosocial Implications of Genetic Testing in Children and Adolescents. *Am. J. Hum. Genet.* 1995. **57**: 1233-1241.
- Predictive genetic testing in young people:- When is it appropriate?. *J. Paediatr. Child Health.* 2005. **41**: 390-394.
- Presumptive and predictive genetic testing in minors: a systematic review of guidelines and position papers. *Clin. Genet.* 2006. **70**: 374-381.

Acknowledgement

- Thank you to Stefanie Frace, BS for assisting with this presentation.



Huntington's Disease Society of America

The information provided by speakers in workshops, forums, sharing/networking sessions and any other educational presentation made as part of the 2008 HDSA convention program is for informational use only.

HDSA encourages all attendees to consult with their primary care provider, neurologist or other healthcare provider about any advice, exercise, medication, treatment, nutritional supplement or regimen that may have been mentioned as part of any presentation.