



MCPAP Clinical Conversations:

Screening Toddlers for Autism in the General Pediatrics Office: Pitfalls and Opportunities

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Early Detection of ASD

DBP'S AND CHILD PSYCHIATRISTS WORKING
TOGETHER WITH PCP'S

Outline of presentation/ discussion

1. Introductions
2. Screening for ASD: Scope of the problem, current practice patterns
3. Population-based study on screening (Carbone et. al.)
4. Summary: MCHAT: strengths and pitfalls
5. HUB model for more rapid diagnosis
6. Other models for more accurate diagnosis
7. Discussion points: Early diagnosis, late diagnosis, changing diagnosis, and over-diagnosis

Screening for ASD: Scope of the problem

Autism is not always obvious in the primary care office setting

Diagnosis is delayed to ages 4 to 5 years, even though the diagnosis can be made reliably at earlier ages

Delays in diagnosis means delays in accessing services that are believed to be the most potent when the brain is still developing rapidly

MCHAT

Report: M-CHAT R App Report
 Patient ID: 12345678
 Date: 1/1/2017 12:00:00 AM Device: 1/1/2017 12:01:00 AM

Survey	Child's Score	Score Interpretation
M-CHAT-R	10	High-Risk (8-20)

M-CHAT R Item Responses:	High-Risk (8-20)	10
If you point at something across the room, does your child look at it?	Yes	(0)
Have you ever wondered if your child might be deaf?	No	(0)
Does your child play pretend or make-believe?	Yes	(0)
Does your child like climbing on things?	No	(1)
Does your child make unusual finger movements near his or her eyes?	Yes	(1)
Does your child point with one finger to ask for something or to get help?	No	(1)
Does your child point with one finger to show you something interesting?	Yes	(0)
Is your child interested in other children?	No	(1)
Does your child show you things by bringing them to you or holding them up for you to see – not to get help, but just to share?	Yes	(0)
Does your child respond when you call his or her name?	No	(1)
When you smile at your child, does he or she smile back at you?	Yes	(0)
Does your child get upset by everyday noises?	Yes	(1)
Does your child walk?	No	(1)
Does your child look you in the eye when you are talking to him or her, playing with him or her, or dressing him or her?	Yes	(0)
Does your child try to copy what you do?	No	(1)
If you turn your head to look at something, does your child look around to see what you are looking at?	Yes	(0)
Does your child try to get you to watch him or her?	No	(1)
Does your child understand when you tell him or her to do something?	Yes	(0)
If something new happens, does your child look at your face to see how you feel about it?	No	(1)
Does your child like movement activities?	Yes	(0)

Current practice patterns in Primary Care

Questions for discussion:

1. How many PCP's conduct the MCHAT as a routine aspect of their care?
2. How many PCP's complete the MCHAT twice, as recommended?
3. How long does it take to obtain a diagnosis from a specialist?
4. Which specialists are PCP's accessing?

Primary care autism screening and later Autism diagnosis

Carbone PS et al. Pediatrics. Vol 146. No. 2 (2020)

Real-world practice reveals lower rate of identification of autism through the MCHAT

- There are prior reports of low sensitivity of the MCHAT
- MCHAT follow-up interview does not occur consistently

Primary care autism screening and later Autism diagnosis

Carbone PS et al. Pediatrics. Vol 146. No. 2 (2020)

36,233 toddlers

Charts are reviewed for evidence of screening and for later diagnosis of ASD

The study determined:

- How many children were screened for autism
- How many children screened positive
- How many children screened negative
- The age that the diagnosis made

Results

- Of 36,233 children, 522 children were diagnosed with ASD at the time of data pull
- Age at diagnosis: 57 months (4 $\frac{3}{4}$ years) to 107 months (nearly 9 years)
- Prevalence: 1.4% , 1 in 69

Results

Percent of all children screened

- 72.8% of the total population of children were screened either at 18 or 24 months
- 72% of children diagnosed as having ASD (n = 522) were screened at either 18 or 24 months

Results

Screen-positive children were diagnosed with autism at 38.5 months on average

Screen-negative children with ASD ended up getting diagnosed at 48.5 months on average

MCHAT sensitivity = 33.1%

MCHAT PPV (Positive predictive value) 17.8%

Discussion:

Strengths and pitfalls of the MCHAT

Why are some children not screened?

Why are some children not screened twice?

Why do some children who screen negative end up having ASD?

Why are screen-negative children sent for diagnostic evaluation?

Systems changes to enhance timely diagnosis

How can we improve timely diagnosis?

- Increase access to specialists (e.g. Developmental-Behavioral Pediatrician; Child Neuropsychologist; others)
- Increase access to supplemental testing in the primary care office

Model for improving access to diagnosis

The EAE Hub model in Indiana

- Children considered to be at risk are referred to the EAE Hub model
- At-risk not defined clearly, but includes a positive screen

The EAE hub model offers the following components:

- Review and/or administer the ASQ and the MCHAT R/F
- Conduct a diagnostic interview based on DSM criteria
- Do physical examination
- Administer level two screener (Screening tool for autism in toddlers and young children, STAT)

Discussion

Clinical practices that you can use to help improve sensitivity of your screening procedure

- More detailed diagnostic interview
- More detailed behavioral observations
- Parent + clinician shared observations: CARS
- Interactive screening instrument (Second tier screener: RITA-T; STAT)

Second tier screeners

STAT: Screening Test for Autism in Two Year Olds

RITA-T: Rapid Interactive Screening Test for Autism in Toddlers

Discussion

Early diagnosis – why does it matter?

Services related to Autism

Diagnostic stability of Autism

Questions and Comments