Recognizing Autism Under the Age of 2

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Objectives

• Recognize typical and atypical/delayed early social milestones associated with Autism Spectrum Disorders
  - Joint attention
  - Social orienting
  - Play and interests
  - Language
Are ASD symptoms present in infants and toddlers?

- 30-54% of parents register their first concern <12 months, in children diagnosed with autism
- 80-90% of parents recognize child abnormalities < 24 months.

YES!
# Early Social Skills

<table>
<thead>
<tr>
<th></th>
<th>Cognitive development</th>
<th>Social development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Typical child</strong></td>
<td>Typical</td>
<td>Typical</td>
</tr>
<tr>
<td><strong>GDD</strong></td>
<td>Delayed</td>
<td>Delayed, same degree as cognitive</td>
</tr>
<tr>
<td><strong>ASD</strong></td>
<td>Typical or delayed</td>
<td>Marked delay, in excess of cognitive</td>
</tr>
</tbody>
</table>
**Joint Attention Skills***

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Typical</th>
<th>ASD</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-10 months</td>
<td>Gaze monitoring</td>
<td>No eye contact</td>
</tr>
<tr>
<td>10-12 months</td>
<td>Following a point</td>
<td>Does not respond to request “oh look!”</td>
</tr>
<tr>
<td>12-14 months</td>
<td>PIP</td>
<td>Develops advanced self help skills</td>
</tr>
<tr>
<td>14-16 months</td>
<td>PDP</td>
<td>* Consistently absent</td>
</tr>
<tr>
<td>14-18 months</td>
<td>Show and tell</td>
<td>Often brings to parent to obtain repeated action</td>
</tr>
</tbody>
</table>

*Joint attention deficits appear to be specific to ASD and reliably differentiate children with ASD from other developmental disabilities.*
PDP: Pointing merely to show!
JOINT ATTENTION

- Calling another person’s attention to an object or event.
- Gaze monitoring
- Bringing to show
- Proto declarative pointing
- If absent, most robust clue of autism!
Social Orienting

The ability to orient to social stimuli, specifically turning to respond to one’s own name.

<table>
<thead>
<tr>
<th></th>
<th>Typical</th>
<th>ASD</th>
<th>HI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respond to name</td>
<td>NL*</td>
<td>ABNL</td>
<td>ABNL</td>
</tr>
<tr>
<td>Respond to noise</td>
<td>NL*</td>
<td>NL*</td>
<td>ABNL</td>
</tr>
<tr>
<td>Follow command with gesture</td>
<td>NL*</td>
<td>ABNL</td>
<td>Often NL*</td>
</tr>
</tbody>
</table>

NL* = 8 – 12 months
## Play Development

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Typical</th>
<th>ASD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 months</td>
<td>Grasps-sensorimotor</td>
<td>Grasps-sensorimotor</td>
</tr>
<tr>
<td>8-10 months</td>
<td>Throw, bangs, imitates</td>
<td>Throws, bangs</td>
</tr>
<tr>
<td>12-14 months</td>
<td>Block tower</td>
<td></td>
</tr>
<tr>
<td>16-18 months</td>
<td>Simple play*</td>
<td></td>
</tr>
<tr>
<td>18-20 months</td>
<td>Complex play*</td>
<td></td>
</tr>
<tr>
<td>24+ months</td>
<td>Imaginative play*</td>
<td></td>
</tr>
</tbody>
</table>

*Pretend play is significantly correlated with receptive and expressive language*
## Some Play Tools

<table>
<thead>
<tr>
<th>AGE</th>
<th>TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 MONTHS</td>
<td>PEEK A BOO, PATTY CAKE</td>
</tr>
<tr>
<td>18 MONTHS</td>
<td>FEED A DOLL</td>
</tr>
<tr>
<td>24 MONTHS</td>
<td>PRETENDS WITH NON TOY ITEMS, ITSY-BITSY SPIDER</td>
</tr>
<tr>
<td>3 YEARS</td>
<td>PUZZLES, PRETENDS TO TALK FOR DOLLS</td>
</tr>
<tr>
<td>4 YEARS</td>
<td>TURN TAKING GAMES</td>
</tr>
</tbody>
</table>
Typical Language Development

Expressive: two phases

Preverbal *

- Social smile 5 wk
- Coos 6-8 wk
- Laughs 3-4 mo
- Raspberry 4-5 mo
- Squeals 5 mo
- Babbles 6 mo
- UNTIL 6-8 mo!

Verbal

- 1st word 11 mo
- Immature jargon 12 mo
- 4-6 words 15 mo
- 2 words 21 mo
- Pronouns indiscrim 2 y
- Tells stories 4 years, 100% intelligible

*Preverbal skills can emerge even if child is 100% deaf!
Typical Language Development

Receptive

- Alerts to voice 1 mo
- Regards speaker 3 mo
- Listen then vocalizes 5 mo
- Enjoys gesture games 9 mo
- Orient to name 10 mo
- Understands “no” 11 mo
- Command, with gesture 12mo
- 1 step command without gesture 14 mo
- 1 body part 15 mo
- Fetches on command 16 mo
- Points to picture 18 mo
- 6 body parts 20 mo
- 2 step command 24 mo

Child with Autism is often perceived as head strong, strong willed, independent, temperamental. Responds “on his own terms”.
CASE Part I

• What stands out to you about this?

• What would you say?
Temperament

- Activity
- Attention
- Emotional Intensity
- Regulation
- Adaptability
- Irritability
- Sensory Threshold
- Approach/Withdrawal

A 23 mo. old boy with
+ emotional intensity
+ high reactivity
+ inflexibility
+ high activity level
may have typical language and social skills!
## Shyness vs. ASD

<table>
<thead>
<tr>
<th>SHY TEMPERAMENT</th>
<th>ASD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiet and withdrawn in new settings</td>
<td>Lack of spontaneous seeking to share enjoyment, interests, or achievements with others</td>
</tr>
<tr>
<td>Slow to develop friends and play with others</td>
<td>Failure to develop peer relationships appropriate for developmental level, prefers to play alone</td>
</tr>
<tr>
<td>Tends to look away or turn gaze downward when watched</td>
<td>Marked impairment in use of eye gaze</td>
</tr>
<tr>
<td>Takes a long time to become comfortable, seeks parent</td>
<td>May not understand new setting, may not be comforted by parent</td>
</tr>
</tbody>
</table>
Wait!  Time out!

NORMAL, TYPICAL VARIATION

PROBLEM BEHAVIOR

“Oppositional”

Parent child interaction problem

“ODD”

DISORDER

BEHAVIOR

DSM-PC
Red flags of Tantrums

- More than 20 out of 30 days, has a tantrum
- Tantrums more than 3-5 times/day
- Tantrums for more than 25 minutes
- Unable to self calm
- SIB or aggression
- Exaggerated for situation or occur without a clear pattern
CASE Part II
Case Part III

• Anything else?
Swine flu: who is infecting who?
References


• www.firstsigns.org (video clips)

• M-CHAT (with follow up interview) http://www2.gsu.edu/~psydlr/Diana_L_Robins_Ph.D.html

• The Autism Toolkit, AAP (has CSBS-DP Checklist)