



# ADHD

#### HISTORY X MANAGEMENT

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## **TOPIC - HISTORY TAKING**



MEDIC

PATIENT

MARKER

# PLEASE REFER TO YOUR SCRIPTS

## PROMPT

Matthew, a 10-year-old boy, presented to the paediatric outpatient clinic accompanied by his mother. The primary concern was his deteriorating academic performance and increased behavioural problems at school over the past 6 months

**COUNSELLING X PHARMACY** 



# **INTRODUCTION AND RAPPORT BUILDING**

- Confirm patient's identity and consent
- Assess the onset, duration, and progression of symptoms
- Explore the patient's understanding of their condition

## OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Explore onset, duration, and progression of symptoms
- Investigate behavioural symptoms: attention, hyperactivity, impulsivity
- Impact on academic performance and social interactions
- Past treatments, if any, for behavioural issues
- Associated conditions, like sleep disturbances, aggressive behaviour
- Previous psychiatric diagnoses or treatments
- Any behavioural issues noted by teachers or carers
- Changes in sleep patterns
- Any other behavioural interventions previously implemented
- Collateral history from teachers or school reports

## OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "Can you tell me when you first noticed these symptoms in your child? Have they been getting worse, better, or staying the same over time?"
- "Could you describe these behaviours in more detail? Does your child seem more active than other children their age? How well can your child focus on tasks at hand?"
- "How are these behaviours impacting your child's schoolwork or their relationships with peers?"
- "Has your child received any treatments for these behaviours in the past?"
- "Has your child been having trouble sleeping? Do they display any aggressive behaviour?"

# FURTHER EXPLORATION....

- Detailed description of attention span and ability to focus
- Characterisation of hyperactive behaviour
- Explore impulsive actions, decision-making capabilities
- Impact on daily activities: school, relationships with peers
- Any associated emotional symptoms: anxiety, low self-esteem

# FURTHER EXPLORATION

- "Has your child previously been diagnosed with any psychological or psychiatric conditions?"
- "Have your child's teachers or caregivers reported any concerns about their behaviour?"
- "Has your child's sleep been disturbed recently? Do they have trouble falling asleep or staying asleep?"
- "Have you tried any strategies at home to manage these behaviours?"
- "May I have your permission to access school reports or speak with your child's teachers for additional information?"

## **OTHER KEY PHRASES**

- "Could you tell me more about your child's ability to focus on tasks? How easily do they get distracted?"
- "Let's talk about your child's energy levels. Can they sit still for a meal or during class, or are they always on the go?"
- "Does your child make decisions quickly without considering the consequences?"
- "Have these symptoms caused your child to avoid certain activities, or are there tasks that they particularly struggle with?"
- "Has your child seemed worried or down more than usual?"



# **RED FLAGS/COMPLICATIONS**

## • Red Flags

- Self-harming behaviour or suicidal thoughts
- Substance abuse
- Aggressive behaviour causing harm to others
- Failure in school
- Isolation from peers or family

#### • Common Complications:

- Learning disabilities
- Conduct disorders
- Anxiety and mood disorders
- Substance abuse
- Poor self-esteem

## • Risk factors

- Family history of ADHD or other psychiatric conditions
- History of maternal substance abuse during pregnancy
- History of preterm birth or low birth weight
- Environmental stressors (domestic violence, neglect)
- History of trauma or abuse

## **RED FLAGS...**

- "Has your child ever expressed thoughts of wanting to harm themselves or others?"
- "Has your child had access to or used any substances like alcohol or drugs?"
- "Has your child been aggressive or violent towards others?"
- "Has your child's school performance significantly declined?"
- "Has your child been avoiding social activities or isolating themselves?"

#### • "Has your child been diagnosed with any learning disabilities?"

- "Has your child exhibited any recurrent patterns of defiant, disobedient behaviour?"
- "Has your child been diagnosed with any anxiety or mood disorders?"
- "Has your child been using substances like alcohol or drugs?"
- "How would you describe your child's self-esteem or self-confidence?"

## HISTORY

# **RISK FACTORS**

- "Is there a family history of ADHD or other psychiatric conditions?"
- "Was there any substance use during pregnancy?"
- "Was your child born preterm or with a low birth weight?"
- "Has your child been exposed to environmental stressors such as domestic violence or neglect?"
- "Has your child experienced any trauma or abuse?"



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# PAST MEDICAL HISTORY

- Previous psychiatric conditions
- Any chronic physical illnesses
- Regular medications
- Allergies and nature of reaction
- Developmental history (motor, language, social skills)

## DRUG HISTORY

- Use of any regular or over-the-counter medications
- Use of psychiatric medications
- Any history of substance misuse

## FAMILY HISTORY

- Family history of ADHD or other psychiatric disorders
- Family history of learning disabilities or academic difficulties

## SOCIAL HISTORY:

- School performance and behaviour
- Social interactions with peers
- Family dynamics and home environment

HISTORY

# **PAST MEDICAL HISTORY**

- "Has your child been diagnosed with any psychological or psychiatric conditions in the past?"
- "Does your child have any chronic physical health conditions?"
- "Is your child currently taking any regular medications?"
- "Does your child have any known allergies and if so, could you describe the reactions they've had?"
- "Could you tell me about your child's developmental history in terms of motor skills, language, and social skills?"

#### DEVELOPMENTAL HX

- "Could you share about your child's developmental milestones? When did they start walking, talking, and interacting with others?"
- "Were there any delays or unusual patterns in your child's development?"
- 1. "Is your child taking any over-the-counter or prescription medications currently?"
- 2. "Has your child been prescribed any psychiatric medications before?"
- 3. "Has your child ever misused substances?"

## HISTORY

# **IDEAS, CONCERNS AND EXPECTATIONS**

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."



# EXAMINATION

#### • Examination Findings:

- Vital signs, including weight and height percentiles
- General appearance (agitation, restlessness)
- Basic systems examination (cardiovascular, respiratory, abdominal)
- Neurological examination: coordination, evidence of tics
- Mental state examination: mood, thought content, perception
- Mood and affect, evidence of anxiety or depression
- Cognitive function: attention, memory, executive functions

## • Risk Assessment (5 points)

- Assess risk of self-harm or harm to others
- Evaluate risk of academic failure or social isolation

## EXAMINATION

- "I am going to take some basic measurements now including your child's weight and height."
- "I'm observing for any signs of restlessness or agitation in your child."
- "I'm going to do a basic physical exam now. This will involve listening to your child's heart and lungs, and examining their abdomen."
- "I'm going to check your child's coordination now. Can they stand on one foot? How about walking in a straight line?"
- "I'd like to ask your child a few questions to assess their mood and thoughts, if that's alright."
- 1."From my conversation with your child, I'm assessing their mood and affect. I'm also observing for any signs of anxiety or depression."
- 2."I'm going to assess your child's cognitive functions now. I'll be checking their attention, memory, and executive functions."

## **EXAMINATION**

## **DIFFERENTIAL DIAGNOSIS**

- Learning disabilities: specific difficulty in an academic area
- Oppositional defiant disorder: recurrent pattern of negativistic, disobedient behaviour
- Mood disorders: persistent mood changes, with impact on functioning

## HISTORY

## **DIFFERENTIAL DIAGNOSIS**

- "One possibility is that your child might have a learning disability, which is a specific difficulty in an academic area."
- "Another possibility is oppositional defiant disorder, where there is a recurrent pattern of defiant or disobedient behaviour."
- "Finally, mood disorders could also present with changes in mood that impact functioning."

## **RISK ASSESSMENT**

- "I'm assessing any risks of self-harm or harm to others based on your child's behaviours."
- "I'm evaluating the risk of academic failure or social isolation due to the symptoms your child is experiencing."

## HISTORY

## OSCE 01 INVESTIGATION

- ADHD is a clinical diagnosis; investigations are not typically indicated
- If performed, laboratory tests would be within normal limits

## OSCE 01 INVESTIGATION

- "As you may know, ADHD is typically diagnosed based on clinical symptoms. So, there are no specific tests to confirm the diagnosis."
- "However, if we had done any tests, we would expect them to come back within normal ranges."

## MANAGEMENT PLAN

- First-line: Behavioural therapies, including parent management training and classroom interventions
- Second-line: Medication therapy (stimulant or non-stimulant ADHD medications) for moderate to severe cases or if behavioural therapy is ineffective
- Third-line: Re-evaluation of diagnosis, check for any missed comorbidities

#### Management in the Community & Key Principles Before Discharge (2 points)

- Regular follow-ups with community paediatrician or child psychiatrist
- School-based interventions and classroom accommodations
- Explanation of ADHD to patient and parents, including prognosis
- Advice on when to seek help (worsening behaviour, mood changes, self-harm)
- Arranging follow-up appointment with paediatric or psychiatric services

## MANAGEMENT PLAN

- "The first step in managing ADHD is usually behavioural therapies. This could include things like parent management training and interventions at school."
- "If these interventions aren't effective, or if the ADHD is moderate to severe, we might consider medication. There are several options, both stimulant and non-stimulant, that can help manage the symptoms of ADHD."
- "If these treatments aren't effective, it's important to revisit the diagnosis and check for any conditions that might have been missed."

## **COMMUNITY MANAGEMENT**

- "It will be important for your child to have regular follow-ups with a paediatrician or child psychiatrist."
- "There may also be interventions and accommodations that can be made at school to help your child succeed."

Key Principles Before Discharge and Safety Netting:

- 1."Let me explain what we've discussed today. Your child has been diagnosed with ADHD, which affects their ability to pay attention and control impulsive behaviours."
- 2."In terms of when you should seek immediate help, that would be if your child's behaviour worsens, if they experience major mood changes, or if they express any thoughts of self-harm."
- 3. "We will arrange a follow-up appointment for your child with a paediatric or psychiatric service."

# ADVICE TO GUARDIANS/RELATIVES

## **Explanation of Condition**

- ADHD: causes, symptoms, impact on daily life
- Importance of management strategies, including behavioural interventions and possible medication use

#### Advice to Guardians

- How to implement behavioural strategies at home
- How to monitor for worsening symptoms or side effects of medication

### **Useful Resources (2 points)**

• Provide reliable online resources, local support groups for ADHD

## ADVICE TO GUARDIANS/RELATIVES

- "ADHD, or Attention Deficit Hyperactivity Disorder, is a condition that affects your child's ability to focus, stay still, and make decisions. It's caused by a combination of genetic and environmental factors, and it can make school and social interactions challenging."
- "Managing ADHD often involves behavioural interventions, which can help your child learn better ways to deal with their symptoms. In some cases, medication might also be recommended."
- "It's important to implement the behavioural strategies that we discussed at home. This might involve creating more structure, setting clear expectations, and providing positive reinforcement."
- "I also encourage you to monitor your child for any worsening symptoms or side effects if medication is prescribed."
- "I would recommend checking out these online resources and local support groups for ADHD. They
  can provide additional information and support."

# **COMPLICATIONS OF TREATMENT**

#### **MOA of Therapies**

• Discuss how stimulant medications increase concentration of certain neurotransmitters in the brain to improve symptoms of ADHD

#### Complications of Medication and Surgical Therapy: Adverse reactions to medications.

• Discuss potential side effects of medication: appetite changes, sleep disturbance, mood changes

# **COMPLICATIONS OF TREATMENT**

- "If we do decide to use medication, it's important to be aware that they can have side effects. These might include changes in appetite, disturbances in sleep, and changes in mood."
- "There are no surgical therapies indicated for ADHD."

# FOLLOW UP

• Follow-up in 1 month to assess response to interventions; regular follow-ups every 3-6 months thereafter

## **FOLLOW UP**

 "I'd like to schedule a follow-up appointment for your child in about a month to see how the interventions are working. After that, regular follow-ups every 3-6 months are usually recommended."

# SEVERITY SYSTEMS

• Use of ADHD Rating Scale-IV for objective measurement of disease activity

## **NEVER MISS**

- Detailed behavioural history from both parents and school
- Assessment for comorbid conditions (learning disabilities, mood disorders)
- Thorough discussion about treatment options and potential side effects of medications
- Risk assessment for self-harm or harm to others
- Safety netting: advice on when to seek help

## **TOP 1% QUESTIONS**

- 1. Discuss how the neurotransmitter abnormalities in ADHD are addressed by stimulant medications
- 2. What is the role of behavioural interventions in managing ADHD?
- 3. What are the potential implications of untreated ADHD in adulthood?
- 4. Discuss the controversies around the diagnosis and treatment of ADHD
- 5. How can schools accommodate students with ADHD to facilitate their learning?

# SOFT SKILLS

• Demonstrating empathy and effective communication throughout the consultation.

- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

### **KEY LEARNING POINTS**

• TO BE DONE TOGETHER

DATA

## MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?





# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?



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# **QUESTIONS?**

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## **AUTISM**

#### HISTORY X MANAGEMENT

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### **TOPIC - HISTORY TAKING**



MEDIC

PATIENT

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### PLEASE REFER TO YOUR SCRIPTS

### PROMPT

8-year-old male, brought in by parents due to behavioural concerns at school and home, particularly with social interaction and repetitive behaviours.

**COUNSELLING X PHARMACY** 



### **INTRODUCTION AND RAPPORT BUILDING**

- Confirm patient's identity and consent
- Assess the onset, duration, and progression of symptoms
- Explore the patient's understanding of their condition

### **INTRODUCTION AND RAPPORT BUILDING**

 "Good morning, my name is Dr. [Name]. I am a paediatrician. How may I address your child? Would it be alright if I asked some questions to better understand your concerns?"

### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Explore onset and progression of symptoms
- Identify and explore any communication difficulties
- Discuss unusual behaviours or interests
- Explore social interaction difficulties
- Investigate any behavioural issues at school or home
- Discuss previous psychiatric diagnoses or treatments
- Explore early developmental history, focusing on social, language, and cognitive milestones
- Discuss information from school including academic progress and social integration
- Explore collateral history from teachers or other carers
- Review any interventions previously implemented

### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "Could you please tell me when you first started noticing your child's symptoms?"
- "Does your child face difficulties in communicating, such as understanding or expressing themselves?"
- "Have you observed any unusual behaviours or interests in your child, like lining up toys or intense focus on a specific topic?"
- "How does your child interact with their peers? Do they engage in cooperative play or do they
  prefer to play alone?"
- "Have there been any behavioural concerns raised at school or at home?"

### FURTHER EXPLORATION...

- Explore any delays or regression in language skills
- Investigate repetitive behaviours and resistance to change
- Identify difficulties in social interactions and playing with peers
- Explore sensitivity to sensory stimuli
- Discuss any associated difficulties with sleep or feeding

### FURTHER EXPLORATION

- "Did you notice any delays in your child's language development, such as speaking their first words or combining words?"
- "Does your child engage in any repetitive behaviours or have a strong need for routines?"
- "Does your child face difficulties when trying to interact with their friends or siblings?"
- "Have you noticed if your child is unusually sensitive to sounds, textures, lights, or tastes?"
- "How is your child's sleep? Do they follow a regular sleeping pattern? What about their feeding patterns?"

### **OTHER KEY PHRASES**

- "Has your child previously been evaluated or treated by a psychologist or psychiatrist?"
- "Could we take a moment to go over your child's developmental history? Specifically, when did they hit major milestones like smiling, babbling, walking, and speaking?"
- "How is your child's academic performance? Has the school implemented any educational interventions?"
- "May I review any observations or reports from your child's teachers or other carers?"
- "Has your child participated in any behavioural, speech, or occupational therapy?"



### **RED FLAGS/COMPLICATIONS**

#### • Red Flags

- $\circ~$  No babbling or pointing by age one
- No single words by age two
- Loss of previously acquired social or language skills
- $\circ~$  No eye contact or social smiling
- Excessive lining up of toys or objects

#### • Common Complications:

- Associated learning disabilities
- Anxiety and mood disorders
- Sleep disturbances
- Epilepsy
- Gastrointestinal disorders, such as constipation

#### • Risk factors

- Family history of autism or other developmental disorders
- History of prenatal or perinatal complications
- Exposure to certain medications during pregnancy
- History of preterm birth
- Advanced parental age

### **RED FLAGS...**

- "Did your child babble or point by the time they were one?"
- "Did your child speak single words by two years old?"
- "Have you noticed any loss of skills that they once had, such as no longer using words they previously said regularly?"
- "How often does your child make eye contact? Do they respond to their name?"
- "Does your child line up their toys or objects excessively?"
- "Does your child struggle academically or have they been diagnosed with a learning disability?"
- "Have you noticed signs of anxiety or changes in mood?"
- "Does your child have difficulty falling asleep or staying asleep?"
- "Has your child ever had a seizure?"
- "Does your child have a regular bowel movement? Have you noticed any changes in their appetite?"

#### HISTORY

### **RISK FACTORS**

- "Is there a family history of autism or any other developmental or mental health conditions?"
- "Were there any complications during pregnancy or delivery?"
- "Was your child exposed to any medications or substances during pregnancy?"
- "Was your child born preterm or had a low birth weight?"
- "May I ask about the age of both parents when your child was born?"



### PAST MEDICAL HISTORY

- Any associated medical conditions (e.g., epilepsy, gastrointestinal problems)
- Review of developmental milestones
- Regular medications, including any psychotropic medications
- Allergies and the nature of the reaction
- Past or current therapies, including behavioural, speech, and occupational therapy

#### DRUG HISTORY

- Use of any regular or over-the-counter medications
- Current psychotropic medications
- Any history of medication side effects

#### FAMILY HISTORY

- Family history of autism or other developmental disorders
- Family history of genetic conditions, such as Fragile X syndrome

#### SOCIAL HISTORY:

- Discuss the child's performance and behaviour in school
- Explore social interactions with peers
- Discuss family dynamics and home environment

#### HISTORY

### PAST MEDICAL HISTORY

- "Has your child been diagnosed with any other medical conditions?"
- "Let's review your child's development. At what age did they reach milestones like speaking, walking, and toilet training?"
- "Is your child currently taking any medications?"
- "Does your child have any allergies?"
- "Has your child been involved in any therapeutic interventions like behavioural, speech, or occupational therapy?"

#### DEVELOPMENTAL HX

- "Let's review your child's developmental history in more detail. Did they show any delays in reaching their milestones?"
- "Has your child experienced any delay in their developmental milestones such as speaking, walking, or learning to use the toilet?"
- "Could you tell me more about your child's academic performance at school?"
- "Has your child experienced any loss or regression of skills they once had?"
- "Does your child engage in pretend or imaginative play?"

#### HISTORY

### **IDEAS, CONCERNS AND EXPECTATIONS**

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."



### EXAMINATION

#### • Examination Findings:

- Vital signs, including weight and height percentiles
- General appearance, including any repetitive behaviours or movements
- General physical examination
- Neurological examination, including assessment of gross and fine motor skills
- Mental state examination: mood, thought content, perception

#### • Risk Assessment (5 points)

- Assess risk of self-harm or harm to others
- Evaluate risk of social and academic difficulties

### EXAMINATION

- "Let's begin by taking your child's vital signs and measurements."
- "I'm observing your child's behaviours and movements. They may not be aware that I'm watching them."
- "With your permission, I'd like to conduct a physical examination of your child. This will include listening to their heart and lungs, and checking their skin and joints."
- "Next, I'll be doing a basic neurological examination. This includes asking your child to do some simple tasks to check their balance and coordination."
- "Finally, I'll do a mental state examination. This involves observing and talking to your child to understand their mood, thoughts, and perceptions."
- "I'm assessing if there is any risk of your child causing harm to themselves or others."
- "I'm also evaluating your child's risk of social difficulties and academic struggles."

#### **EXAMINATION**

### **DIFFERENTIAL DIAGNOSIS**

- Intellectual disability: cognitive deficits affecting daily life
- Language disorder: difficulty with language comprehension or production
- ADHD: symptoms of inattention, hyperactivity, and impulsivity



### **DIFFERENTIAL DIAGNOSIS**

- "It's important to consider other conditions that can cause similar symptoms. One such condition is Intellectual Disability, but this typically involves more general difficulties with thinking skills and daily activities."
- "Another condition to consider is Language Disorder. However, this primarily affects the ability to understand or produce language."
- "Attention Deficit Hyperactivity Disorder (ADHD) can also have overlapping symptoms with autism, but ADHD primarily involves difficulties with attention and hyperactivity."

### HISTORY

### OSCE 01 INVESTIGATION

- Autism is a clinical diagnosis; specific tests are not typically indicated
- If performed, genetic testing might identify an associated genetic condition
- Neuroimaging, if performed, is typically normal

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### **INVESTIGATION**

- "The diagnosis of autism is usually made based on careful observation and history taking. In general, no specific tests are needed."
- "If we do any testing, it would be to rule out other conditions that might explain your child's symptoms. But in most cases, tests are not required."
- "Imaging tests, like an MRI, are typically not required unless your child has specific symptoms that suggest a problem in the structure of their brain."

### MANAGEMENT PLAN

- First-line: Behavioural and educational interventions
- Second-line: Medication therapy for associated symptoms (e.g., ADHD, anxiety, aggression)
- Third-line: Comprehensive evaluation for associated conditions

#### Management in the Community & Key Principles Before Discharge (2 points)

- Regular follow-ups with a multidisciplinary team
- School-based interventions and accommodations
- Explanation of autism to patient and parents, including prognosis
- Advice on when to seek help (worsening behaviour, mood changes, self-harm)
- Arranging follow-up appointment with a multidisciplinary team

### MANAGEMENT PLAN

- "The first line of management for autism typically involves behavioural and educational interventions. This includes teaching skills to improve communication, social interaction, and manage challenging behaviours."
- "In some cases, medication may be helpful for managing symptoms such as impulsivity, inattention, or mood changes."
- "If the interventions aren't effective or if new symptoms develop, we'll re-evaluate the diagnosis and look for any associated conditions that may have been missed."

### **COMMUNITY MANAGEMENT**

- "Long-term management of autism involves regular follow-up with a team of specialists who can monitor progress and adjust treatment as needed."
- "School-based interventions are also crucial. This includes things like special education services, classroom accommodations, and social skills training."

Key Principles Before Discharge and Safety Netting:

- "Before we end today's session, let me explain what autism is. It's a developmental disorder that affects communication and social interaction. There can also be unusual behaviours and interests, as well as sensory sensitivities."
- "It's important to seek help if your child's behaviour worsens, or if you notice new symptoms such as mood changes or self-harm."
- "We'll schedule a follow-up appointment to monitor your child's progress and adjust their treatment plan as needed."

### ADVICE TO GUARDIANS/RELATIVES

#### **Explanation of Condition**

- Explanation of autism, its causes, symptoms, and potential impact on daily life
- Discussion of treatment options and the importance of early interventions

#### Advice to Guardians

- Discussion of home-based strategies to promote social and communication skills
- Advice on monitoring for associated conditions and potential complications

#### **Useful Resources (2 points)**

• Provide reliable online resources, local support groups for autism

### ADVICE TO GUARDIANS/RELATIVES

- "There are strategies you can use at home to promote your child's skills. These include creating a structured routine, using visual aids, and practicing social situations."
- "It's important to monitor for any changes in your child's behaviour or mood. If you notice new or worsening symptoms, it's essential to reach out to your healthcare team."
- "Autism is a condition that affects the way a person communicates and interacts with the world. It can make it challenging to understand social cues, communicate effectively, and adapt to changes. Everyone with autism is unique, and their experiences can be very different."
- "The treatment for autism often involves teaching new skills to improve communication and social interaction. In some cases, medication may be used to manage associated symptoms."

### **COMPLICATIONS OF TREATMENT**

#### **MOA of Therapies**

• Discuss how the recommended medications work to manage associated symptoms

**Complications of Medication and Surgical Therapy:** Adverse reactions to medications.

- Discuss potential side effects of medication: appetite changes, sleep disturbance, mood changes
- No surgical therapy is indicated for autism

### **COMPLICATIONS OF TREATMENT**

- "If we decide to use medication, it's important to monitor for potential side effects. These can include changes in appetite, sleep disturbances, and mood changes."
- "Please note that surgery is not a treatment for autism."

### FOLLOW UP

• Follow-up in 3 months to assess response to interventions; regular follow-ups every 6 months thereafter

### **FOLLOW UP**

• "We'll arrange a follow-up appointment in 3 months to assess how your child is responding to the interventions. Following this, we'll schedule regular follow-ups every 6 months."

### SEVERITY SYSTEMS

• Use of Autism Diagnostic Observation Schedule (ADOS-2) to measure symptoms

### **NEVER MISS**

- Early recognition of red flags for autism
- Thorough evaluation of developmental history and current symptoms
- Recognition of common comorbid conditions
- Evaluation of family and social environment
- Comprehensive management plan involving behavioural and educational interventions and potential medication use for associated symptoms

### **TOP 1% QUESTIONS**

- 1. Discuss the role of genetics in autism
- 2. Discuss the impact of early interventions on prognosis
- 3. Explain how autism might present differently in girls compared to boys
- 4. Discuss the concept of the "autism spectrum"
- 5. Describe the principles of behavioural interventions for autism

### **SOFT SKILLS**

• Demonstrating empathy and effective communication throughout the consultation.

- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

### **KEY LEARNING POINTS**

• TO BE DONE TOGETHER

DATA

## MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?





# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?



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# **QUESTIONS?**

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## **BILIARY ATRESIA**

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### **TOPIC - HISTORY TAKING**



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### PLEASE REFER TO YOUR SCRIPTS

### PROMPT

A 2-month-old male infant is brought to the paediatric clinic by his parents due to persistent jaundice

**COUNSELLING X PHARMACY** 



### **INTRODUCTION AND RAPPORT BUILDING**

- Confirm patient's identity and consent
- Assess the onset, duration, and progression of symptoms
- Explore the patient's understanding of their condition

### **INTRODUCTION AND RAPPORT BUILDING**

- Hello, I'm Dr. [Your Name]. Thank you for bringing [child's name] in today.
- What is your relation to the child? Are you the main carer?
- May I ask, what are your main concerns? or what has brought you in today?

### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Detailed characterisation of presenting symptoms (jaundice, dark urine, pale stools, hepatomegaly)
- Onset and progression of symptoms
- Feeding history, particularly stool changes
- Impact of symptoms on daily activities (such as feeding or weight gain)
- Previous episodes of similar symptoms
- Collateral history from parents/carers
- Nature of jaundice (persisting beyond two weeks of age, increasing intensity)
- Description of urine and stool colour changes
- Presence and characterisation of any other systemic symptoms
- Effect of symptoms on feeding patterns and growth

### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

I understand your concerns and I appreciate your coming here today. We'll work together to understand what's going on. Can you please tell me more about these symptoms? When did they start, and have you noticed if they are progressing?

Thank you for providing those details. I'm interested in [child's name]'s feeding habits, have you noticed any changes in their appetite or their stool? How has [his/her] weight been?

I see. Has [child's name] ever experienced similar symptoms in the past?

Has there been any history of liver diseases or similar symptoms in your family?

### FURTHER EXPLORATION...

- Timing and progression of jaundice
- Changes in stool and urine colour
- Previous treatments and their outcomes
- Family history of similar symptoms or liver diseases

### FURTHER EXPLORATION

- Thanks for sharing. Have there been any changes to [child's name]'s urine or stool color, and have these changes affected his/her feeding patterns or growth?
- Could you also tell me about any treatments [child's name] has received in the past for similar symptoms, and how effective they were?

### **RED FLAGS/COMPLICATIONS**

#### • Red Flags

- Persistent jaundice beyond two weeks of age
- Pale, chalky stools
- Dark, amber urine
- Failure to thrive or weight loss

#### • Common Complications:

- Chronic liver disease leading to cirrhosis
- Portal hypertension
- Failure to thrive or malnutrition
- Potential requirement for liver transplantation

#### • Risk factors

- Asian or African American descent
- Female sex
- Premature birth or low birth weight
- History of infections or exposure to toxins

### **RED FLAGS...**

• We need to pay attention to certain symptoms that might indicate a more serious issue, such as jaundice persisting beyond two weeks of age, pale or chalky stools, dark, amber urine, or a lack of weight gain. Have you noticed any of these?

#### COMPLICATIONS

• [Child's name] might also be at risk of complications, such as cirrhosis, portal hypertension, hepatopulmonary syndrome, or hepatocellular carcinoma. I'll explain more about these if necessary once we've confirmed the diagnosis.

#### RISK FACTORS

• Certain factors can increase the risk of biliary atresia. For example, a family history of liver diseases, certain genetic conditions, or exposure to infections or toxins during pregnancy. Can we discuss any of these potential risk factors?

### PAST MEDICAL HISTORY

- History of neonatal jaundice or liver disease
- Birth history, including premature birth or birth trauma
- Any other relevant diseases or conditions
- Any previous surgeries or hospitalisations

#### DRUG HISTORY

- Use of hepatotoxic medications
- Any known drug allergies and the nature of reactions

#### FAMILY HISTORY

- Family history of liver diseases or conditions associated with biliary atresia (such as Alagille syndrome)
- Consanguinity

#### SOCIAL HISTORY:

- Parental occupation and lifestyle
- Environmental exposures
- Maternal history during pregnancy (illnesses, medication use)

### **PAST MEDICAL HISTORY**

 I see. It's also important for us to review [child's name]'s past medical history, including neonatal jaundice or liver disease, any premature birth or birth trauma, and any other relevant diseases or conditions. Can you please provide these details?

#### DH

 Thanks for sharing. Now, I would like to know if [child's name] has taken any medications in the past, particularly any that can be harmful to the liver. Also, does [he/she] have any known drug allergies and how does [he/she] react to them?

#### FH

• Thank you. Let's move on to family history. Do you know of any family members who have had liver diseases or conditions that might be associated with biliary atresia, such as Alagille syndrome? Also, is there any consanguinity in the family?

#### SH

• Could you tell me a little about your occupation and lifestyle, and if there were any environmental exposures or illnesses during pregnancy that might have affected [child's name]?

### **IDEAS, CONCERNS AND EXPECTATIONS**

- ICE
  - "I'd like to take a moment to understand your perspective on your child's illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."



### EXAMINATION

#### • Examination Findings:

- General appearance (jaundice, failure to thrive)
- Vital signs, including weight and growth chart
- Abdominal examination (hepatomegaly, splenomegaly)
- Stigmata of chronic liver disease (spider angiomas, palmar erythema)
- Neurological examination, including assessment for signs of developmental delay

### EXAMINATION

"Would it be okay if I examine you now?" [Consent] "I'm going to start by checking your temperature and then proceed to examine your breast."

#### MUST MUST MUST - ASK FOR CHAPERONE!!

**EXAMINATION** 

### **DIFFERENTIAL DIAGNOSIS**

- Neonatal hepatitis: Would present similarly but usually has a different pattern of liver enzymes and biopsy findings.
- Alagille syndrome: This genetic condition can cause symptoms similar to biliary atresia but would also have associated heart, eye, and skeletal abnormalities.
- Choledochal cyst: This would usually be visible on ultrasound.
- Metabolic or genetic liver disease: Usually associated with other systemic symptoms or family history.

### **DIFFERENTIAL DIAGNOSIS**

I have a few possible diagnoses in mind. It could be neonatal hepatitis, Alagille syndrome, a choledochal cyst, or a metabolic or genetic liver disease. We'll need to do further tests to confirm.

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### INVESTIGATION

- Liver function tests (elevated bilirubin, transaminases)
- Coagulation profile (prolonged PT/INR)
- Abdominal ultrasound to identify biliary tract abnormalities
- Hepatobiliary scintigraphy to assess for bile flow
- Liver biopsy if needed
- Newborn screening results, if available

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### **INVESTIGATION**

- Doctor: "To get a better understanding of your child's condition, I would like to run a few tests. This will likely include a blood test to look at their liver function, which can give us insights about the health of the liver and bile ducts."
- Doctor: "We may also conduct a coagulation profile which measures how well the blood clots an important function of the liver."
- Doctor: "An abdominal ultrasound is a safe, non-invasive test that allows us to view the liver and bile ducts. This can help us identify any abnormalities in these structures."
- Doctor: "In some cases, we might need to conduct a liver biopsy. This involves taking a small sample of liver tissue to examine under a microscope. It can provide valuable information about the extent of any liver damage."
- Doctor: "I also want to explain that we might conduct a special imaging test called a hepatobiliary scintigraphy. This test uses a safe, radioactive material to highlight the bile ducts in the liver. It can help us to assess how well bile is flowing out of the liver."
- Doctor: "Finally, we will need to review any newborn screening results if available. These results can provide important insights into your child's overall health."

### MANAGEMENT PLAN

- First-line: Kasai procedure (hepatoportoenterostomy) to restore bile flow
- Second-line: Nutritional support, including fat-soluble vitamin supplementation
- Third-line: Liver transplantation for failed Kasai procedure or advanced liver disease
- Management in the community: Regular follow-up with pediatric gastroenterologist, growth and development monitoring, vaccinations as per schedule, prophylactic antibiotics, and Ursodeoxycholic acid administration

## MANAGEMENT PLAN

As for the management plan, the first line of treatment is usually a surgical procedure called the Kasai procedure to restore bile flow. Nutritional support including fat-soluble vitamin supplementation is also critical. In some cases, a liver transplant might be necessary.

#### KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- Explanation of diagnosis, management plan, and potential complications to parents
- Advice on when to seek immediate medical attention (e.g., worsening jaundice, bleeding, confusion, swelling in legs or abdomen)
- Regular follow-ups for monitoring liver function and growth

#### KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (3 POINTS)

It's important for you to understand what biliary atresia is and how it can affect [child's name]'s overall health. The disease involves inflammation and obliteration of the bile ducts, leading to liver damage. Treatment is crucial and I will guide you through the interventions and their likely outcomes.

## ADVICE TO GUARDIANS/RELATIVES

#### • Explanation of the Condition to Patients and Their Relatives (3 points):

- $\circ~$  What is biliary atresia and how it affects the liver and overall health
- The importance of treatment and possible interventions
- Likely outcomes and potential complications

#### • Advice to Guardians (2 points):

- Assistance in the child's nutrition and medication management
- Reliable online resources for further information about biliary atresia

## ADVICE TO GUARDIANS/RELATIVES

- Before we end, let me recap our discussion today. We suspect that [child's name] might have biliary atresia, and we will do further tests to confirm. There are possible complications we need to monitor for. The management involves a surgical procedure, nutritional support, and possibly liver transplantation. Regular follow-ups will be essential. Do you have any questions or concerns?
- In managing [child's name]'s condition, your role is crucial. Ensuring proper nutrition and medication adherence is essential. There are also reliable online resources for further information about biliary atresia which I can recommend.

## **COMPLICATIONS OF TREATMENT**

#### **MOA of Therapies**

- Explanation of how Ursodeoxycholic acid works
- Brief description of Kasai procedure and liver transplantation

#### **Complications of Medication and Surgical Therapy:**

- Side effects of medications, including antibiotics and immunosuppressants
- Complications of surgery (cholangitis, ascites, portal hypertension)

## **COMPLICATIONS OF TREATMENT**

#### **Complications of Medication and Surgical Therapy:**

- There are side effects to the medications we might need to use, including antibiotics and immunosuppressants, and there could be complications from surgery such as cholangitis, ascites, and portal hypertension. However, we will monitor [child's name] closely and manage any complications that arise.
- Following the Kasai procedure, there are a few possible complications to be aware of, such as cholangitis, ascites, or portal hypertension. In some cases, the Kasai procedure may not be successful and a liver transplant may be necessary. But please remember, our healthcare team will do their utmost to ensure the best possible outcome.

## FOLLOW UP

- Follow-up with pediatric gastroenterologist within two weeks after discharge, then regular followups every 3 months
- Referral to pediatric surgeon for consideration of Kasai procedure or liver transplantation
- Frequent monitoring of growth, development, and liver function

## **FOLLOW UP**

We'll need to schedule regular follow-ups, at first within two weeks after discharge, then regular follow-ups every 3 months with a pediatric gastroenterologist. We may also need to refer [child's name] to a pediatric surgeon for consideration of Kasai procedure or liver transplantation.

## **NEVER MISS**

- 1. Thorough examination of the breast and axillary lymph nodes.
- 2. Appropriate request for imaging and abscess fluid culture.
- 3. Adequate explanation of condition, treatment, and potential complications.
- 4. Proper safety-netting advice (worsening symptoms, signs of wound infection).
- 5. Clear follow-up plan and when to seek additional care.

## **TOP 1% QUESTIONS**

- 1. What is the most common organism to cause breast abscesses?
- 2. What is the first-line antibiotic choice for breast abscess?
- 3. How does smoking increase the risk of breast abscesses?
- 4. How do you differentiate between a galactocele and a breast abscess?
- 5. What is the typical management for a lactating woman with a breast abscess?

## **SOFT SKILLS**

• Demonstrating empathy and effective communication throughout the consultation.

- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

### **KEY LEARNING POINTS**

• TO BE DONE TOGETHER

DATA

## MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?





# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?



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# **QUESTIONS?**

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## **DEVELOPMENTAL DELAY**

HISTORY X MANAGEMENT

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## **TOPIC - HISTORY TAKING**



MEDIC

PATIENT

MARKER

## PLEASE REFER TO YOUR SCRIPTS

## PROMPT

A 3-year-old child is brought to the clinic by their parents due to concerns about developmental delay.

**COUNSELLING X PHARMACY** 



## **INTRODUCTION AND RAPPORT BUILDING**

- Introduces Self and Purpose: Introduction of the medical professional, confirms patient identity, explains the purpose of the conversation, and ensures patient comfort. [1 point]
- Obtains Consent: Asks for consent to proceed with the questions and possibly a physical examination later on. [1 point]
- Chief complaint and duration.

## **INTRODUCTION AND RAPPORT BUILDING**

"Hello [patient's name], thank you for taking the time to meet with me today. I'd like to discuss your symptoms and health in detail to best understand how we can help. If you have any questions or concerns at any point, please feel free to stop me."

#### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Age at which parents/guardians first became concerned.
- Specific milestones missed/delayed.
- Speed of progression (static, deteriorating, improving).
- When did they start noticing the delay compared to peers or siblings?
- Did the child lose previously acquired skills? (regression)
- Interventions or therapies tried and their outcomes.

#### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- "Can you tell me when you first began to have concerns about your child's development?"
- "Were there specific milestones that your child didn't reach at the expected time?"
- "How has the situation changed over time? Is it the same, getting worse, or improving?"
- "Compared to their peers or siblings, when did you notice this difference in their development?"
- "Has your child lost any skills they once had?"
- "Have you tried any specific interventions or therapies? How did those go?"

## FURTHER EXPLORATION...

- Speech and language delays.
- Gross motor skills: crawling, walking.
- Fine motor skills: pinching, scribbling.
- Social and interpersonal skills: engaging with peers, eye contact.
- Cognitive skills: problem-solving, understanding instructions.

COLLATERAL

• Information from schools, nurseries, or health visitors.

## FURTHER EXPLORATION

- "Has your child faced any challenges with speaking or understanding language?"
- "How about bigger movements, like crawling or walking?"
- "What about smaller tasks like picking up small items or drawing?"
- "Do you notice how your child interacts with others their age? Do they maintain eye contact?"
- "How does your child handle problem-solving or following instructions?"

#### COLLATERAL

 "Have teachers, caregivers, or health visitors provided any feedback or observations about your child's development?"

## **RED FLAGS/COMPLICATIONS**

#### • Red Flags

- Regression of achieved skills.
- Persistent unusual or repetitive behaviours.
- Absence of babbling by 12 months.
- Lack of gesturing (pointing, waving) by 12 months.
- No single words spoken by 16 months.

#### • Common Complications:

- Social isolation.
- Learning disabilities.
- Behavioural problems.

#### • Risk factors

- Prenatal exposure: infections, drugs, alcohol.
- Family history of developmental disorders.
- Birth trauma or complications.

## **RED FLAGS...**

- "Did your child stop doing something they once could, like speaking a word?"
- "Are there any repetitive or unusual behaviors you've observed?"
- "By 12 months, was your child babbling or making gestures like pointing or waving?"
- "Did they say any distinct words by 16 months?"

#### COMPLICATIONS

- 1. "Does your child often feel left out or struggle with making friends?"
- 2. "Have you noticed any specific learning challenges or behavior issues?"

#### **RISK FACTORS**

- "During pregnancy, were there any infections or medications you remember? Did you consume alcohol?"
- "Is there anyone else in the family with similar developmental challenges?"
- "Were there any issues or complications during childbirth?"

#### HISTORY

## **PAST MEDICAL HISTORY**

- Neonatal history: premature birth, infections, prolonged hospital stays.
- Previous hospitalizations or surgeries.

#### **DRUG HISTORY**

- Current medications.
- Allergies and specific nature of allergic reactions.

#### **FAMILY HISTORY**

- Similar developmental delays.
- Known genetic conditions or neurodevelopmental disorders.

#### Social History:

- Schooling, interaction with peers, hobbies.
- Family dynamics, support systems.



## **PAST MEDICAL HISTORY**

Past Medical and Surgical History:

- "Tell me about when your child was a newborn. Were they premature or faced any health issues?"
- "Has your child been hospitalized before or undergone any surgeries?"

#### DH

- "Is your child currently on any medications?"
- "Does your child have any known allergies?"

#### FAMILY AND SOCIAL HISTORY:

- Is there a family history of developmental delays or any genetic conditions we should be aware of?"
- "How is your child doing at school? Do they have friends and activities they enjoy?"
- "At home, who supports the child, and how do you cope with these challenges?"

#### HISTORY

## **IDEAS, CONCERNS AND EXPECTATIONS**

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."



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## EXAMINATION

#### • Examination Findings: - CHAPERONE

- Vital Signs: Temperature, blood pressure, heart rate, respiratory rate, oxygen saturation, weight.
- Airway, Breathing: Respiratory rate, effort, and pattern.
- Cardiovascular Findings: Heart rate, murmur detection.
- **Respiratory:** Clear lungs, absence of wheezes or crackles.
- Abdominal Findings: Organomegaly, tenderness.

#### • Neurological Findings:

- Cranial nerves I-XII.
- Gross and fine motor skills.
- Reflexes, tone, and power.

#### • Peripheral Examination:

Muscle tone, joint deformities.

#### • Psychiatric Findings & MMSE:

- Mood, interest in environment, interaction with examiner.
- Age-appropriate MMSE (based on developmental milestones).

#### • Risk Assessment:

- Self-harm, harm to others (as age-appropriate).
- Parental stress or coping difficulties.

#### • Specialty Specific Examinations:

• Developmental assessment tests, e.g., Denver II, Ages and Stages.



- "I'd like to conduct a few physical examinations to get a clearer picture. Is that alright?"
  - "I'd like to perform a physical examination to gather more information. This will involve checking vitals, examining different parts of the body, and assessing developmental milestones. I'll guide you through each step, and you're free to ask questions."
  - (Explain each step to the patient before performing it, ensuring they are comfortable.)



#### **DIFFERENTIAL DIAGNOSIS**

1. Developmental Delay:

• Non-progressive, delay in some but not all areas of development.

- 2. Intellectual Disability:
  - Significant impairments in cognitive function and adaptive behaviour.
- 3. Autism Spectrum Disorder:
  - Social communication challenges, repetitive behaviours.

Reasoning: Developmental delay primarily focuses on the delay of milestones, whereas intellectual disability considers cognitive and adaptive challenges. Autism has characteristic social and behavioural issues.

#### HISTORY



#### **DIFFERENTIAL DIAGNOSIS**

- DEVELOPMENTAL DELAY
  - The child is not achieving some developmental milestones within the expected age range.
- Intellectual Disability:
  - The child exhibits significant cognitive and adaptive impairments.
- Autism Spectrum Disorder:
  - The child shows difficulties in social communication and displays repetitive behaviors.

#### HISTORY

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# INVESTIGATION

1. Bloods:

• Thyroid function tests, karyotype, genetic testing.

2. Swabs:

• None specific for developmental delay.

3. Imaging:

• MRI Brain to assess structure.

4. Others:

• Hearing and vision tests.

#### OSCE 01 INVESTIGATION

 "To understand better, we might need some tests like blood tests, a possible brain scan, or checking their hearing and vision. These will provide us with more detailed information about your child's health and development."

## **MANAGEMENT PLAN**

- Immediate Management:
  - Address any medical needs, sensory impairments.
- First Line:
  - Early intervention services: physiotherapy, speech and language therapy.
- Second Line:
  - Specialist referral: paediatric neurologist, developmental paediatrician.
- Third Line:
  - Genetic counselling if indicated.
- Prevention:
  - Adequate prenatal care, avoid known teratogens.
- Lifestyle Changes:
  - Regular routines, consistent behavioural strategies.
- Management in the Community:
  - Continued therapies, support in school settings.

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## **MANAGEMENT PLAN**

- Immediate Management:
  - Address any medical needs and sensory impairments.
- First Line Management:
  - Initiate early intervention services, including physiotherapy and speech therapy.
- Second Line Management:
  - Refer the child to a specialist, such as a pediatric neurologist or developmental pediatrician.
- Third Line Management:
  - Genetic counseling may be recommended based on genetic testing results.
- Prevention:
  - Emphasize the importance of adequate prenatal care and avoiding known teratogens.
- Lifestyle Changes:
  - Provide guidance on maintaining regular routines and consistent behavioral strategies.
- Management in the Community:
  - Ensure continued therapies and support in school settings.

#### KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- Diagnosis and management explained clearly.
- Support groups or resources identified.
- Plan for regular follow-ups established.
- Schools and other institutions informed if necessary.
- Safetynetting advice provided.

#### • SAFETY NETTING: Return if:

- If regression of previously gained skills occurs.
- Any new concerning behaviours or symptoms.
- Failure to achieve new milestones within a reasonable time frame.

#### KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (3 POINTS)

- Clear Explanation: Ensure the parents understand the diagnosis and management plan.
- Support Network: Identify support groups and resources for the parents.
- Follow-Up Plan: Establish a plan for regular follow-ups and communication with schools.
- School Notification: Inform schools or institutions if necessary for additional support
- Safety Netting: "It's essential to keep an eye on a few things. If your child loses any skills they once had, shows any new worrying behaviors, or doesn't reach new milestones in a reasonable timeframe, please contact us immediately."

## ADVICE TO GUARDIANS/RELATIVES

**EXPLANATION TO PATIENTS/RELATIVES:** "Developmental delay means that a child isn't reaching milestones like walking or talking at the expected age. It can be due to a range of factors, sometimes unknown. The important thing is getting early support and interventions."

"It's crucial to engage with regular therapy sessions and follow recommendations at home. Be patient, every child progresses at their pace."

#### • Useful Resources:

- Local early intervention programs.
- Developmental pediatric clinics.
- Support groups for parents.

#### ADVICE TO GUARDIANS/RELATIVES

- "From our discussion and examinations, your child seems to have a developmental delay. This
  means they're taking a bit longer to reach certain milestones, like walking or talking. Various
  factors could cause this, sometimes we don't pinpoint a specific one. But what's crucial is getting
  the right support early on."
- "I recommend engaging with therapy sessions regularly and implementing the advised exercises at home. Remember, every child is unique and progresses at their own pace. Your patience, love, and support are invaluable."

#### **COMPLICATIONS OF TREATMENT**

#### **Complications of Medication:**

• NA

#### **COMPLICATIONS OF TREATMENT**

• NA

## FOLLOW UP

- Regular developmental assessments.
- Ongoing therapy as needed.
- School supports and Individualized Education Plan (IEP) if required.

#### **SEVERITY SYSTEM**

#### **FOLLOW UP**

#### **NEVER MISS**

- 1. Detailed developmental milestone history.
- 2. Neurological examination.
- 3. Immediate interventions and therapies.
- 4. Support resources for guardians.
- 5. Regular follow-up and assessments.

#### **TOP 1% QUESTIONS**

1. How does the Barker Hypothesis relate to developmental delay?

- 2. How can epigenetics influence a child's development?
- 3.Compare and contrast the Denver II vs. Ages and Stages developmental assessment tools.
- 4. What role do mirror neurons play in developmental disorders?
- 5. How does the gut-brain axis impact neurodevelopment?

## SOFT SKILLS

• Demonstrating empathy and effective communication throughout the consultation.

- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."

#### **KEY LEARNING POINTS**

• TO BE DONE TOGETHER

DATA

# MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?





# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?



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# **QUESTIONS?**

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# **DOWNS SYNDROME**

HISTORY X MANAGEMENT

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#### **TOPIC - HISTORY TAKING**



MEDIC

PATIENT

MARKER

# PLEASE REFER TO YOUR SCRIPTS



#### PROMPT

A 7-year-old child with Down Syndrome presented with acute breathing difficulties and persistent cough.

**COUNSELLING X PHARMACY** 



osce **02** 



#### **INTRODUCTION AND RAPPORT BUILDING**

- Introduce self and verify patient's identity.
- Obtain consent.
- Open-ended question about presenting complaint.

## **INTRODUCTION AND RAPPORT BUILDING**

- 1.Good morning, my name is Dr. [Your Name], and I'll be your physician today. May I kindly confirm your name and date of birth?"
- 2."Before we proceed, I'd like to ask for your consent to discuss your medical history and perform an examination."
- 3. "Could you please start by telling me about the reason for your visit today? Is there anything specific that's been bothering you?"

#### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

- Patient Demographics: Confirm patient's age, name, and caregiver details.
- Presenting Complaint: Document the specific concerns that brought the patient to the consultation.
- Duration of Symptoms: Note when the symptoms started and any variation over time.
- Developmental Milestones: Discuss motor skills, language development, and social milestones.
- Feeding/Digestive Issues: Enquire about difficulties with feeding, swallowing, or digestive issues.
- Cardiac Symptoms: Ask about symptoms suggestive of congenital heart disease (e.g., shortness of breath, poor feeding, failure to thrive).
- Vision and Hearing: Explore any concerns regarding the child's vision or hearing.



#### OBTAINS A THOROUGH HISTORY OF THE PATIENT'S PRESENTING SYMPTOMS

"I see that [Patient's name] has been having some trouble recently. Can you tell me what concerns brought you in today?"

Duration of Symptoms: "When did you first notice these symptoms? Have they been constant or do they come and go?"

Exploration of Symptoms: "It's important for us to understand [Patient's name]'s growth and development. Can you share how he's been doing with his motor skills, speech, and interactions with others?"



### FURTHER EXPLORATION...

- Specifics of Developmental Delay: Clarify areas of delay, such as walking or speaking.
- Behavioral Concerns: Identify any behavioral issues or changes noted by caregivers.

- COLLATERAL HISTORY:
  - School/Daycare Feedback: Gather observations from teachers or caregivers regarding the child's behavior and development.

### FURTHER EXPLORATION

- Feeding/Digestive Issues: "Have there been any issues with feeding, like difficulty swallowing, or any changes in his digestion or bowel movements?"
- Cardiac Symptoms: "Given [Patient's name]'s history with an AV canal defect, we should keep a close watch on his heart health. Has he shown any signs of breathing difficulties, fatigue during feeding, or not gaining weight as expected?"
- Vision and Hearing: "How are his vision and hearing? Has he had any difficulties in these areas, or have you noticed any changes?"
- History of Presenting Complaint: "Could you specify which developmental milestones you've noticed [Patient's name] is delayed in, such as walking or talking?"

# osce

## **RED FLAGS/COMPLICATIONS**

#### • Red Flags

- Signs of Acute Illness: Identify any acute changes in health or behavior indicating a new illness.
- Severe Developmental Regression: Note any loss of previously achieved milestones.

#### • Common Complications:

• List of Complications: Discuss common complications associated with Down Syndrome, including heart defects, hearing loss, and hypothyroidism.

#### • Risk factors

• Genetic Predisposition: Note any family history of chromosomal abnormalities.

# OSCE

## **RED FLAGS/COMPLICATIONS**

- "Have you noticed any sudden changes in [Patient's name]'s health or behavior that seem unusual or concerning?"
- "Children with Down Syndrome, like [Patient's name], may face certain health challenges, including heart conditions, hearing loss, or thyroid issues. Has he experienced any related complications?"
- "Is there a history of chromosomal abnormalities like Down Syndrome in your family?"

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## **PAST MEDICAL HISTORY**

• Chronic Conditions: Document any ongoing medical concerns or diagnoses.

#### **DRUG HISTORY**

- Current Medications: Review medications and dosages.
- Allergies: Document allergies and reactions.

#### FAMILY HISTORY

• Family Medical History: Include any genetic disorders or congenital anomalies.

#### SH

• Support Systems: Assess the family's understanding and access to community resources.





## **PAST MEDICAL HISTORY**

• "Besides his heart repair, has [Patient's name] had any other ongoing health concerns?"

#### Family and Social History

- "Let's discuss your family's health history. Are there any genetic disorders or congenital anomalies among close relatives?"
- Social History: "How do you feel about the support you're receiving? Are you connected to any community resources or support systems that help with [Patient's name]'s care?"





#### **IDEAS, CONCERNS AND EXPECTATIONS**

- ICE
  - "I'd like to take a moment to understand your perspective on your illness. It's important for me to know your ideas, concerns, and expectations regarding your condition and this consultation. Please feel free to express any fears, worries, or questions you may have. We're here to address them together."



## osce

#### EXAMINATION

- Vital Signs: Record temperature, heart rate, respiratory rate, blood pressure, and weight.
- General Appearance: Note features characteristic of Down Syndrome.
- Cardiovascular Examination: Assess for murmurs, rhythm, and signs of heart failure.
- Respiratory Examination: Check for signs of respiratory distress or infections.
- Abdominal Examination: Look for hepatosplenomegaly or signs of gastrointestinal obstruction.
- Neurological Examination: Observe tone, reflexes, and any neurological deficits.
- Musculoskeletal Examination: Examine for atlantoaxial instability.
- Dermatological Findings: Note any skin lesions or characteristic dermatoglyphics.
- Hearing and Vision Assessment: Perform basic hearing and vision screening.
- Identify Immediate Risks: Highlight any signs indicating the need for urgent intervention.



"I will now proceed with a physical examination, checking his vital signs, heart and lung function, and other necessary assessments. Please feel free to ask any questions as we go along."

"As I assess [Patient's name], I'll be looking for any signs that might require immediate attention."





#### **DIFFERENTIAL DIAGNOSIS**

1. Other Genetic Syndromes: Consider features that may suggest alternative diagnoses. 2. Acquired Conditions: Distinguish from conditions with secondary developmental delay.





#### **DIFFERENTIAL DIAGNOSIS**

"While [Patient's name]'s symptoms are consistent with common issues in Down Syndrome, we always consider and rule out other possible causes."



# osce

## INVESTIGATION

- 1. Complete Blood Count: Check for hematological abnormalities common in Down Syndrome.
- 2. Thyroid Function Tests: Screen for hypothyroidism.
- 3. Echocardiogram: Assess for congenital heart disease.
- 4. Hearing Test: Conduct audiometry or refer to audiology.
- 5. Vision Test: Perform ophthalmologic evaluation.
- 6. Genetic Testing: Confirm diagnosis with karyotyping or chromosomal microarray.



#### **INVESTIGATION**

"We'll need some tests to get a complete picture of [Patient's name]'s health, including blood tests, thyroid function, and heart evaluation."

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#### **MANAGEMENT PLAN**

- Immediate Management: Address any acute issues such as infections or cardiac concerns.
- First Line Management: Schedule regular follow-ups with pediatrics, cardiology, audiology, and ophthalmology.
- Second Line Management: Engage with physiotherapy, occupational therapy, and speech therapy as needed.
- Third Line Management: Consider endocrinology referral for thyroid function monitoring and treatment.
- Prevention and Lifestyle Changes (2 Points)
  - Immunizations: Ensure up-to-date vaccinations.
  - Nutrition and Exercise: Advise on healthy diet and physical activity to prevent obesity.
- Management in the Community (2 Points)
  - Early Intervention Programs: Encourage participation in therapies and educational programs.
  - Support Groups: Connect family with local Down Syndrome support groups.



#### **MANAGEMENT PLAN**

"Our plan will include managing any acute conditions and regular follow-ups with specialized care. We'll also look at incorporating therapies that support his development."

"Keeping [Patient's name] up-to-date with his immunizations is key. We'll also talk about nutrition and activities suitable for him."

"I recommend looking into early intervention programs and support groups that can provide additional help and resources."

#### KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- Stable Clinical Condition: Confirm that the child is clinically stable.
- Caregiver Understanding: Ensure caregivers understand the child's conditions and follow-up plan.
- Safety Netting:
  - When to Seek Help: Educate on signs of complications such as signs of infection or acute illness.



#### KEY PRINCIPLES BEFORE DISCHARGE AND SAFETY NETTING (5 POINTS)

- "Before going home, we'll ensure [Patient's name] is stable and that you fully understand his care plan."
- "I want to make sure you know what warning signs to look out for and when to seek further help."



## ADVICE TO GUARDIANS/RELATIVES

#### • Explanation to Patients and Relatives:

 To Patients and Relatives: Explain the genetic nature of Down Syndrome and implications for development and health.

Advice to Guardians:

 Consent and Confidentiality: Discuss the importance of consent for treatments and maintaining the child's confidentiality.

#### • Resources:

 Leaflets and Websites: Provide materials from reputable sources like the Down's Syndrome Association.



#### ADVICE TO GUARDIANS/RELATIVES

"Down Syndrome is a genetic condition that affects [Patient's name]'s development and health in various ways. It's important we address all aspects of his care."

- "Your consent is essential for any treatment [Patient's name] receives, and be assured that his confidentiality is a priority for us."
- "There are resources available that provide great information on Down Syndrome. I can provide you with leaflets and direct you to trustworthy websites."



## **COMPLICATIONS OF TREATMENT**

1. Complications of Medication (5 Points)

- Medication Side Effects: Discuss potential side effects of common medications.
- Post-Surgical Care: Outline risks and care following surgeries, especially cardiac repair.
- 2. Mechanism of Action of Medication Therapies (5 Points)
  - Explanation of Medications: Describe how thyroid hormones or other medications may be used.



#### **COMPLICATIONS OF TREATMENT**

- "Let's talk about the potential side effects of the medications [Patient's name] is on, and what to
  expect after surgical procedures, especially those involving the heart."
- "Thyroid medication, for instance, helps regulate metabolism, which can be an issue in Down Syndrome. We'll monitor how [Patient's name] responds to his treatment closely."



## FOLLOW UP

• Regular Screening: Set a schedule for ongoing monitoring and assessment according to UK guidelines.



## **FOLLOW UP**

"[Patient's name] will have regular check-ups to monitor his progress. We'll use specific growth and developmental charts to track his milestones."

#### SEVERITY SYSTEM

- Developmental Surveillance: Use standard growth and developmental charts specific for Down Syndrome for monitoring.
- •



#### **NEVER MISS**

1. Missed Congenital Heart Disease: Ensure proper cardiac assessment.

- 2.Unaddressed Developmental Delays: Confirm that therapies and interventions are in place.
- 3. Failure to Screen for Common Comorbidities: Thyroid, hearing, and vision must be regularly assessed.
- 4. Lack of Safetynetting Information: Caregivers should be informed about when to seek urgent care.
- 5. Inadequate Caregiver Support: Ensure caregivers are connected to community resources.

#### **TOP 1% QUESTIONS**

- 1. Genetic Specificity: What is the most common chromosomal pattern in Down Syndrome, and how does it affect phenotype?
- 2.Early Intervention Impact: How does early intervention influence long-term outcomes in children with Down Syndrome?
- 3. Cardiac Anomaly Management: What is the first-line treatment for an atrioventricular septal defect in a child with Down Syndrome?
- 4. Thyroid Monitoring: At what frequency should thyroid function tests be conducted in children with Down Syndrome?
- 5. Developmental Milestones Charting: How do developmental milestones for children with Down Syndrome differ from typical development charts?

## SOFT SKILLS

- "Before we conclude, I want to make sure that all your concerns and questions have been addressed. Is there anything else you'd like to discuss?"
- Demonstrating empathy and effective communication throughout the consultation.
- "Thank you for sharing all this information with me, it's been really helpful in understanding your situation. Do you have any questions or concerns about anything we've discussed today?"
- Closing the consultation: "Thank you for your time today. I know this can be a lot to take in, but it's important to remember that we're here to support you every step of the way. If you have any further questions or concerns, please don't hesitate to ask."



#### **KEY LEARNING POINTS**

• TO BE DONE TOGETHER

DATA



# MANAGEMENT

- What went well?
- What went poorly?
- What will you do next time?





osce **02** 

#### OSCE **03**

# WHY DON'T YOU TRY?

- Test your history taking skills?
- Try examination/investigation/dx formulation?
- Try a Mock exam?





# **QUESTIONS?**

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