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Case 24 (July 30 2009): [N Engl J Med. 361\(5\):511-518](#)

Demographic: Female, 26yrs, Not pregnant, America North, General speciality

Clinical features extracted from the case and entered into the query box:

bilateral painful submandibular swelling
dry mouth
increased thirst
painful swallowing
decreased appetite
ear pain
weight loss
dry eyes
vaginal dryness
hair loss

Synonyms used by Isabel for the above query:

ear pain
dry mouth
hair loss
decreased appetite
dry eyes
weight loss
painful swallowing
increased thirst
vaginal dryness
swelling
painful

STOP !

Before you read further you might want to construct your own:

- Final diagnosis

In the following section you will find:

- The final diagnosis of the case
- Did Isabel suggest the Final diagnosis

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Differential Diagnoses considered by the MGH panel:

- Tuberculosis
- MALT lymphoma
- Sjögren's syndrome
- Systemic lupus erythematosus

Final Diagnosis of the case according to NEJM:

Chronic sclerosing sialadenitis (IgG4-associated chronic sclerosing sialadenitis, Küttner's tumor).

Differential Diagnoses of the case as given by Isabel:

- Tuberculosis – under Infectious diseases
- MALT lymphoma – Non-hodgkin’s lymphoma – under Neoplastic diseases
- Sjögren's syndrome – under Rheumatic diseases
- Systemic lupus erythematosus – under Rheumatic diseases

Was the final diagnosis given by Isabel:

Yes – Chronic sclerosing sialadenitis under Sialadenitis in Gastrointestinal diseases.

Isabel Final Diagnosis:

The screenshot displays the Isabel healthcare interface. On the left, under 'ENTER CLINICAL FEATURES', there are dropdown menus for age (young adult (16 - 30 years)), gender (female), pregnancy (not-pregnant), region (America North), and speciality (General). Below this is a section for 'ENTER QUERY TERMS ON SEPARATE LINES:' with a list of symptoms: painful submandibular swelling, dry mouth, increased thirst, painful swallowing, decreased appetite, ear pain, weight loss, dry eyes, vaginal dryness, and hair loss. There are buttons for '+ Add a Clinical Feature' and 'Get Checklist >>'. At the bottom left, there is a 'Predictive Text' prompt and a 'Help' link. The main area is titled 'YOUR VIEW' and shows '12 GASTROINTESTINAL DISORDERS - YOUR VIEW'. A list of disorders includes Diarrheal Disorders, Peptic Ulcer Disease, and Sialadenitis. Sialadenitis is highlighted, and a pop-up box explains why the diagnosis came up, listing matched terms and a 31% degree of match. Below this, there is a section for '14 Body Systems' with a list of categories including Gastrointestinal Disorders, Rheumatic Diseases, Endocrine Disorders, Infectious Diseases, Respiratory Disorders, Nephrology Disorders, Nervous System Disorders, Cardiac Disorders, Nutritional Disorders, Gynecological Disorders, Liver Disorders, and Neoplastic Diseases.



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Isabel Differential:

Tuberculosis:

YOUR VIEW Degree Of Match

6 INFECTIOUS DISEASES - YOUR VIEW

- HIV / AIDS ? RD
- Tuberculosis ? RD
 - Why did this diagnosis come up ?**
We matched the terms: otalgia | otalgias | odynophagia | pain | pains
Degree of match between query entered and Isabel database (Not clinical probability): 32%
- Mumps Infection ? RD
- Bruceellosis ? RD
- Nocardia Infection ? RD

14 Body Systems

- INFECTIOUS DISEASES
- RESPIRATORY DISORDERS
- NEPHROLOGY DISORDERS
- NERVOUS SYSTEM DISORDERS
- CARDIAC DISORDERS
- NUTRITIONAL DISORDERS
- GYNECOLOGICAL DISORDERS
- LIVER DISORDERS
- NEOPLASTIC DISEASES
- PSYCHOLOGIC DISORDERS
- TOXICOLOGY DISORDERS
- SHOW ALL DIAGNOSES

MALT Lymphoma:

YOUR VIEW Degree Of Match

6 NEOPLASTIC DISEASES - YOUR VIEW

- Leukemia ? RD
- Hodgkin's Disease ? RD
- Non-Hodgkin's Lymphoma ? RD
 - Why did this diagnosis come up ?**
We matched the terms: anorexia | decreased appetite | poor appetite | weight loss | pain | pains | swollen | swelling
Degree of match between query entered and Isabel database (Not clinical probability): 37%
- Liver Neoplasms ? RD
- Head and Neck Neoplasms ? RD

14 Body Systems

- INFECTIOUS DISEASES
- RESPIRATORY DISORDERS
- NEPHROLOGY DISORDERS
- NERVOUS SYSTEM DISORDERS
- CARDIAC DISORDERS
- NUTRITIONAL DISORDERS
- GYNECOLOGICAL DISORDERS
- LIVER DISORDERS
- NEOPLASTIC DISEASES
- PSYCHOLOGIC DISORDERS
- TOXICOLOGY DISORDERS
- SHOW ALL DIAGNOSES

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Systemic lupus erythematosus Sjögren's syndrome

YOUR VIEW **Degree Of Match**

8 RHEUMATIC DISEASES - YOUR VIEW

| |
|--|
| <input checked="" type="checkbox"/> SLE ? RD |
| Why did this diagnosis come up ? X |
| We matched the terms: alopecia anorexia dry eye dry eyes weight loss pain pains |
| Degree of match between query entered and Isabel database (Not clinical probability): 47% |
| Rheumatoid Arthritis ? RD |
| Wegener's Granulomatosis ? RD |
| <input checked="" type="checkbox"/> Systemic Sclerosis ? RD |
| Sjogren's Syndrome ? RD |

14 Body Systems

| |
|----------------------------|
| GASTROINTESTINAL DISORDERS |
| RHEUMATIC DISEASES |
| ENDOCRINE DISORDERS |
| INFECTIOUS DISEASES |
| RESPIRATORY DISORDERS |
| NEPHROLOGY DISORDERS |
| NERVOUS SYSTEM DISORDERS |
| CARDIAC DISORDERS |
| NUTRITIONAL DISORDERS |
| GYNECOLOGICAL DISORDERS |
| LIVER DISORDERS |
| NEOPLASTIC DISEASES |

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