

Case Presentation



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Case Report

معرفی بیمار



• خانم ۴۴ ساله

• اهل تهران

• خانه دار

• تاریخ مراجعه: ۱۴۰۱/۱۰/۲۹

• مراجعه به اورژانس بیمارستان ایرانمهر از یکی از بیمارستانهای تهران با ماشین شخصی (بدون هماهنگی قبلی)

سابقه بیماری

• یک هفته قبل: آبله مرغان

• علائم بیمار یک روز قبل مراجعه:

- تب و لرز شدید
- اختلال هوشیاری
- دیسترس تنفسی

معاینات اورژانس

- اختلال هوشیاری
- دیسترس شدید تنفسی
- افت فشار خون (حدود ۶۰ میلی متر جیوه)
- تاکیکاردی
- ضایعات پوستی:
- وزیکولار در حال بهبودی
- پتشی، بوربورا و اریتم منتشر پوستی

سابقه دارویی و سفر

- مصرف داروی لیتیوم
- فقط سفر به قشم (۲ هفته قبل)
- بدون سابقه تماس با دام یا مسافرت به مناطق روستایی

Vital Signs	VBG
BP: 60/?	PH: 7.11
PR: 116	P Co2: 36
T: 36	HCo3: 14
RR: 38	Lac: 2.3
	BE: -14

تشخیص افتراقی مطرح برای بیمار کدام است؟



D.D

- **Streptococcal TSS**
- **Staphylococcal TSS**
- **Septic Shock**
- **Leptospirosis**
- **Toxic epidermal necrolysis**
- **Viral Hemorrhagic Fiver**
- **Infective endocarditis**
- **TTP**

Chickenpox

آزمایش های بیمار

WBC=۱۷۲۰۰	SGOT=8230	CRP=99.4
پلی = ۸۸٪	SGPT=3840	آلبومین سرم = ۲.۹
لنف = ۱۰٪	PCT=12.57	بیلی روبین توتال = ۹/۷۰
HB=17.5	Troponin= 36	بیلی روبین مستقیم = ۸/۴۰
HCT=49.9	LDH= 21030	CPK= 404
پلاکت = ۱۹۰۰۰	Na= 132	Ferritin=30680
اوره = ۹۵	K=5.4	D-Dimer=16.7
کراتینین = ۳.۲	Bs= 101	

مناسبتترین درمان جهت بیمار کدام است؟

- Aggressive management of circulatory shock
- Vasopressors
- Antibiotics
- Renal replacement therapy
- Intubation and ventilatory support



برای بیمار پس از انجام اقدامات اولیه تشخیصی، زیر یکساعت اقدامات درمانی به شرح ذیل شروع شد:

- نرمال سالین با کنترل CVP
- وازوپرسور
- مروپنم + وانکومايسين
- Antitoxic Antibiotics (کلیندامایسین 900 میلی گرم TDS)
- IVIG
- دیالیز
- انتوباسیون و وصل به دستگاه ونتیلاتور

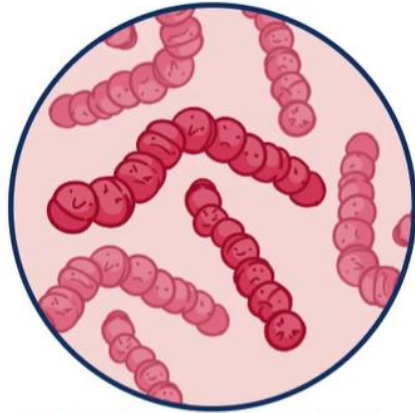
کشت خون بیمار: منفی

کشت خلط بیمار: منفی

متاسفانه بیمار صبح روز بعد با تابلوی شوک و مالتیپل اورگان
فیلر فوت می کند.

TOXIC SHOCK SYNDROME

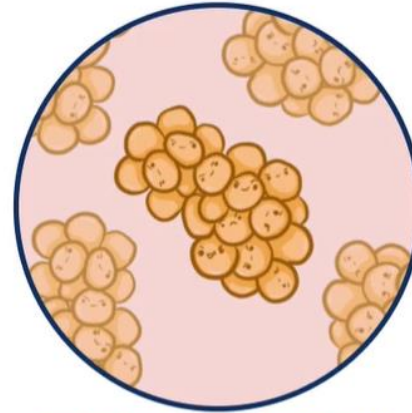
RARE FORM of SEPTIC SHOCK caused by BACTERIA



STREPTOCOCCUS
PYOGENES



STREPTOCOCCAL TSS



STAPHYLOCOCCUS
AUREUS



NON-STREPTOCOCCAL TSS

Case Definition for the Streptococcal Toxic Shock Syndrome

I. Isolation of group A streptococci (*Streptococcus pyogenes*)

- A. From a normally sterile site (e.g., blood, cerebrospinal, pleural, or peritoneal fluid, tissue biopsy, surgical wound)
- B. From a nonsterile site (e.g., throat, sputum, vagina, superficial skin lesion)

II. Clinical signs of severity

A. Hypotension: systolic blood pressure ≤ 90 mm Hg in adults or below fifth percentile for age in children and

B. Two or more of the following signs:

1. Renal impairment: creatinine ≥ 177 $\mu\text{mol/L}$ (≥ 2 mg/dL) for adults or ≥ 2 times the upper limit of normal (ULN) for age; in patients with preexisting renal disease, a twofold or greater elevation over the baseline level
2. Coagulopathy: platelets $\leq 100 \times 10^11/\text{L}$ ($\leq 100,000/\text{mm}^3$) or disseminated intravascular coagulation defined by prolonged clotting times, low fibrinogen level, and the presence of fibrin degradation products.

Case Definition for the Streptococcal Toxic Shock Syndrome

3. **Liver involvement:** serum aspartate aminotransferase, alanine aminotransferase, or total bilirubin levels greater than or equal to two times the ULN for age; in patients with preexisting liver disease, a twofold or greater elevation over the baseline level
4. Adult respiratory distress syndrome defined by acute onset of diffuse pulmonary infiltrates and hypoxemia in the absence of cardiac failure, evidence of diffuse capillary leak manifested by acute onset of generalized edema, or pleural or peritoneal effusions with hypoalbuminemia
5. A generalized erythematous macular rash that may desquamate
6. Soft tissue necrosis, including necrotizing fasciitis or myositis, or gangrene

Factors That Increase the Likelihood of Developing Streptococcal Toxic Shock Syndrome

- Age (neonates and older adults)
- Diabetes
- Alcoholism
- Surgical procedures
- Trauma

Penetrating (insect bites, lacerations, slivers, abrasions, burns)

Nonpenetrating (hematoma, bruise, muscle strain hemarthrosis)

Varicella

Contact with a case

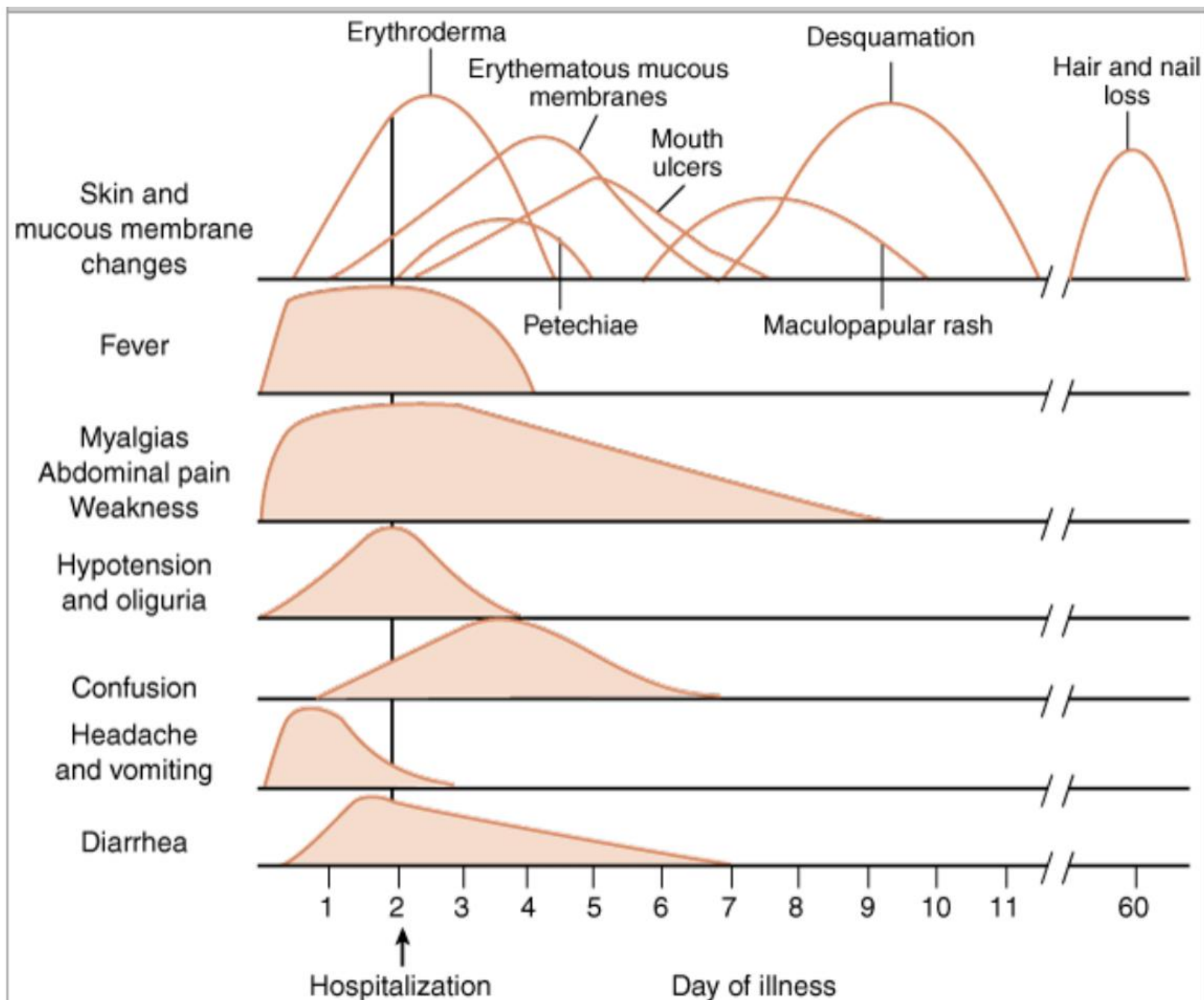
High prevalence of invasive strains in the community

Nonsteroidal antiinflammatory drugs

Based on limited evidence.



CLINICAL FEATURES:



Skin Manifestations:

Diffuse scarlatina-like erythema occurs in 10% of patients. Skin manifestations of streptococcal infection include the following (also see images below):

- ☐ Bullae
- ☐ Scarlet fever-like rash
- ☐ Petechiae or maculopapular rashes
- ☐ Desquamation











Common presenting symptoms and frequency of streptococcal TTS are as follows

- ❑ Tachycardia (80%)
- ❑ Fever (70-81%)
- ❑ Hypotension (44-65%)
- ❑ Confusion (55%)
- ❑ Localized erythema (44-65%)
- ❑ Localized swelling and erythema (30-75%)
- ❑ Scarlatiniform rash (0-4%)

Severe complications from streptococcal TSS include the following:

- ☐ Prolonged and refractory hypovolemic shock (95%)
- ☐ Acute respiratory distress syndrome (55%)
- ☐ Acute kidney injury (reversible in 70%, irreversible 10%)
- ☐ Bacteremia (60%)
- ☐ Electrolyte and acid-base imbalance
- ☐ Cardiac dysrhythmia
- ☐ Thrombocytopenia
- ☐ Disseminated intravascular coagulation

Staphylococcal TSS

Staphylococcal TSS most commonly occurs in women, usually those who are using tampons. TSS develops within 5 days after the onset of menstruation. The other clinical settings where staphylococcal TSS has been reported include the following:

- ☐ Surgical wound infections
- ☐ Postpartum infections
- ☐ Focal cutaneous and subcutaneous lesions
- ☐ Deep abscesses
- ☐ Empyema
- ☐ Peritonsillar abscess
- ☐ Sinusitis
- ☐ Osteomyelitis

Staphylococcal TSS

Approximately 20% of patients with staphylococcal TSS have an influenza-like syndrome characterized by the following:

- ☐ Fever
- ☐ Chills
- ☐ Myalgia
- ☐ Nausea
- ☐ Vomiting
- ☐ Diarrhea



Staphylococcal TSS

The following risk factors have been reported to be associated with staphylococcal TSS:

- ❑ Patients with HIV, diabetes, cancer, ethanol abuse, and other chronic diseases
- ❑ Patients with a recent history of varicella infection (chicken pox)
- ❑ Patients who used nonsteroidal anti-inflammatory drugs (NSAIDs)



Our patients require
attention