Dengue Fever
“case discussion and Local Case Series Report”

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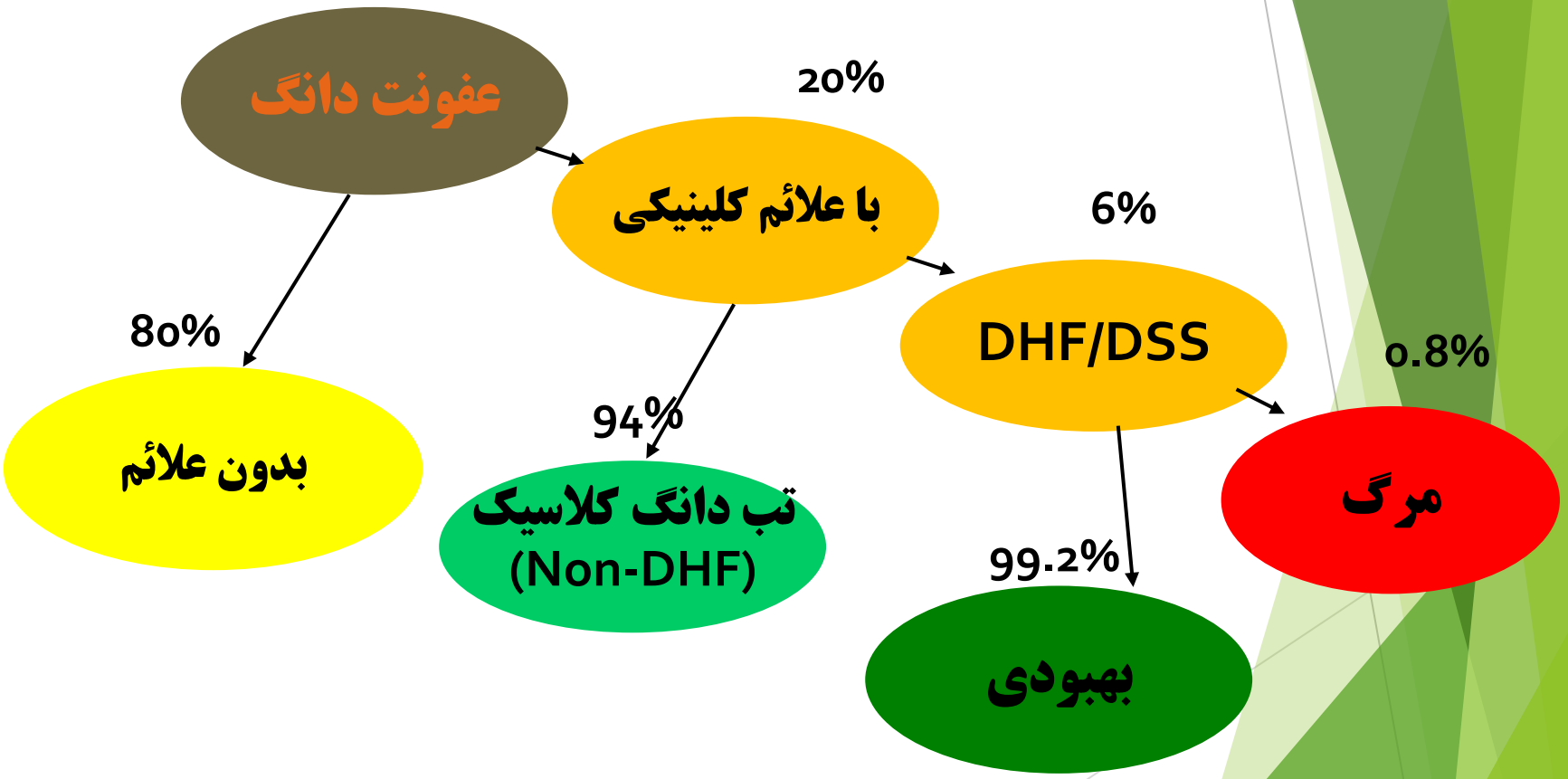
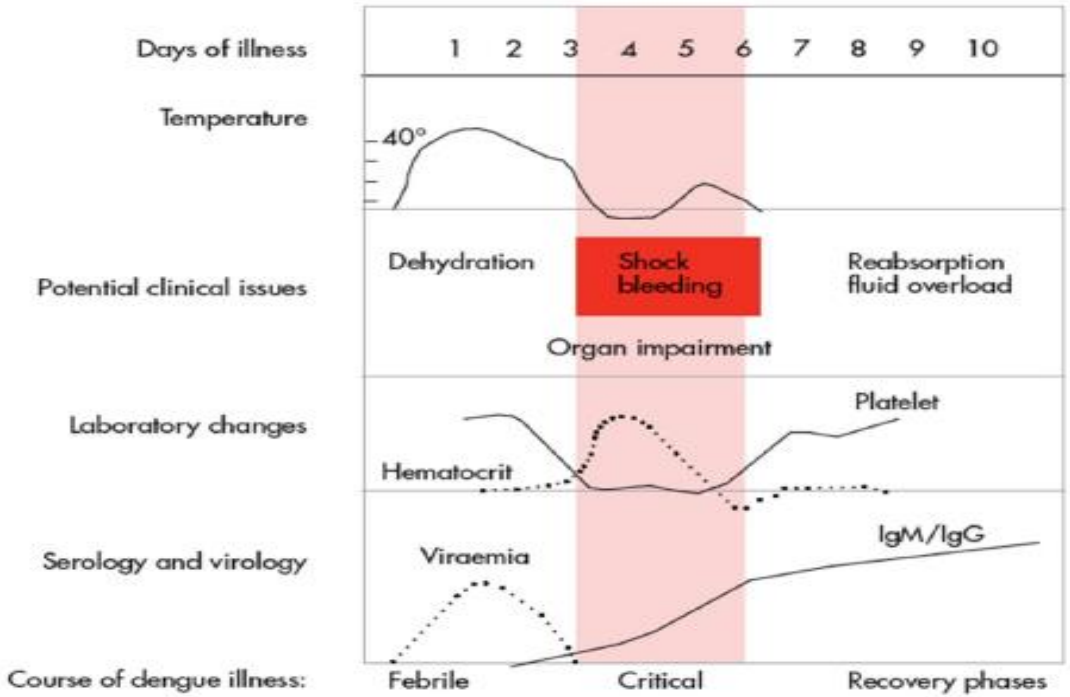
This viral infection causes a major public health challenge.

The World Health Organization (WHO) has determined that the risk is high worldwide, taking into account the growing risk of transmission and the increase in cases and deaths

Types of Dengue Fever



Dengue fever course



Case; background

27 years healthy male in Genave port, with febrile illness which started at the end of a 8 day trip to Emirate (1th June: 12th Khordad)

Surfing, hiking, dived off of a waterfall

Did not get pre-travel vaccinations or advice

•PMH: Asthma, DM(Type 1)

•SH: No HIV risk factors

Stayed in a hotel with concrete floors and “log walls”

No animal contact

Possible insect bites (itchy red bumps on legs)

Saw a “kissing bug” in his bed

Case; illness onset

- **On day before return had sudden onset of fevers and body aches (headache, retro-orbital pain, backache, joint aches)Fevers as high as 39.5^0 c in first 48 hrs of illness**
- **Burning of hands and feet**
- **Severe fatigue**
- **Subsequently developed red rash on trunk**

- Some abd tenderness, but no overt warning signs (bleeding, fluid accumulation, vomiting, etc.)
- Also had loose bowel movements, slight cough (“tickle in throat”)

Presentation to care

Illness day 3 (after return), he sought care at an urgent care clinic, and he was prescribed azithromycin

Day 4, presented to the ED with persistent illness but somewhat lower temperatures with acetaminophen

•PE:

VS: T:38.8, BP:108/61, PR:94, RR: 24

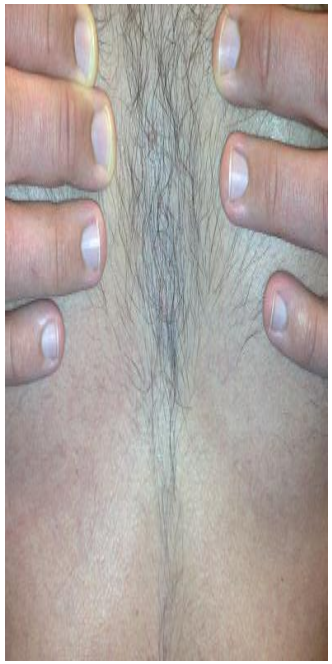
O2 sat:96% at room

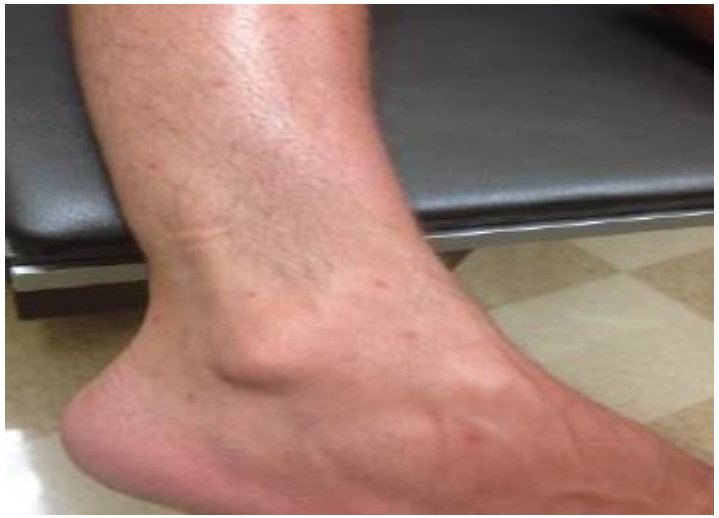
Icter on head and neck

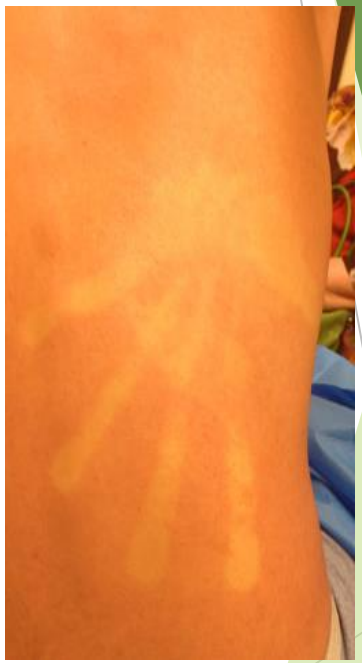
Erythematous macules noted on extremities

Skin—Diffuse blanching erythema, some erythematous papules on legs, no petechial

(day 5)







At the time of admission her lab investigations including:

- CBC: WBC:3100 PMN:42% Hg: 10.6
  PLT:110.000
- Total bilirubin :10.9 D:4.6 mg/dl
- ALT 560 U/L, AST 898 U/L,
- Alkaline phosphatase 540 U/L, albumin 2.9 g/dl,
- PT prolonged 3 sec INR:3.1
- USG shows hepatomegaly with total liver span of 13.5cm with fatty change.

1-What are Differential Diagnosis at This Stage?

2-What is The Best Management at This Stage?

Differential diagnosis

- **Viral hepatitis**
- **Leptospirosis, Brocellosis?**
- **Remotely possible: Malaria, acute HIV, other viral syndromes(EBV,Flu,…)**

- **Arboviral infection (dengue, CHIKV, Zika)**

  Uncomplicated dengue most likely

Plan

- Close clinical monitoring for danger signs
- Avoid NSAIDs
- Return to clinic in 24 hrs
- Carry out lab tests to evaluate for other potential causes

His viral hepatitis screen including Anti HAV, Anti HEV, and Anti HCV, HBSAg, HBCAB were negative

Negative:

- Blood cultures, U/C
- Brucellosis (SAT,2Me)
- leptospirosis Ab
- HIV(ELIZA 4)
- Malaria RDT/smear

Positive for:

- RDT of Dengue virus!

Illness course

- **Day 6:**

  Increased redness of hands and arms; hands mildly swollen.

  Fevers down. Overall feels better.

- **Day 7:**

  On call physician by patient because of widely fluctuating heart rate and pulse ox (he has a home monitor)

  Advised to urgently go to ED for evaluation, however patient did not go.

- **Patient improved symptomatically over the following days, on day 15 of illness only reported mild fatigue**

Case lessons

- **The DDx of returned febrile travelers is broad, even if the presentation fits a specific diagnosis well**
- **Misdiagnosis or no consideration of travel related infections are common at front-line healthcare settings in Iran**
- **Post-pandemic travel will result in increasing numbers of dengue in our clinic, including from South of Iran due to traveling to Asia and Africa,…….!**

Discussion

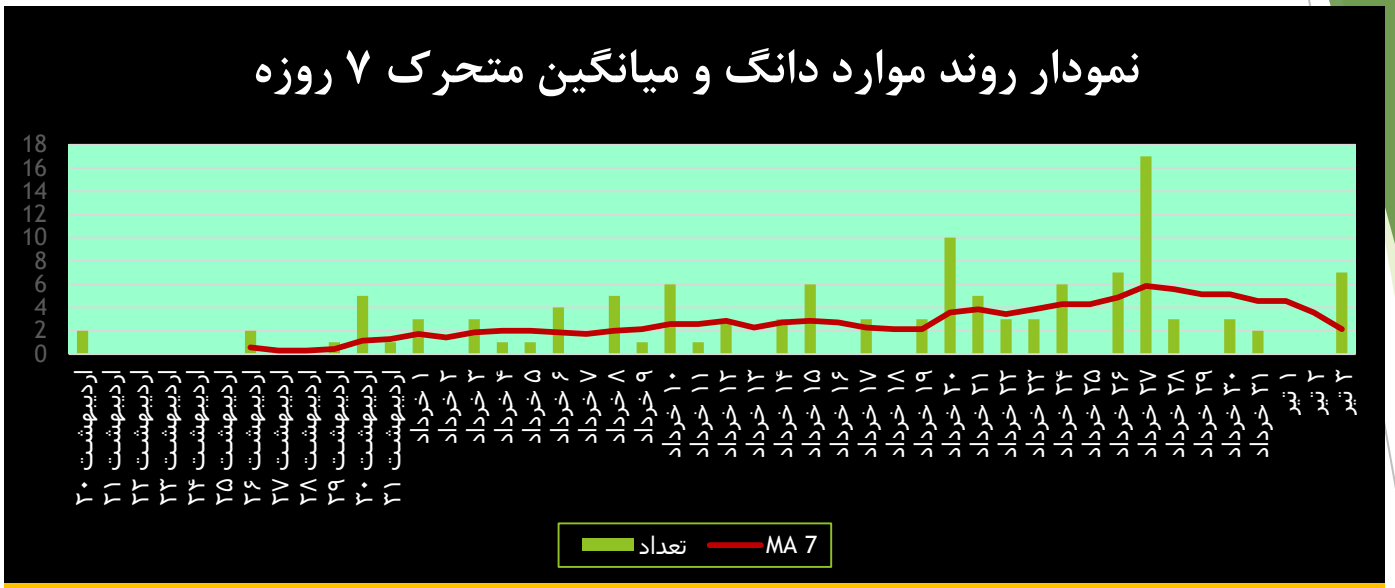
Classic DF is characterized by a febrile onset with headaches, retroorbital pain, muscle pain (myalgia) and low platelet count known as thrombocytopenia in 24%. Therefore, most of the records of DF are clinically similar to other febrile disorders and may go undiagnosed if not promptly monitored and treated.

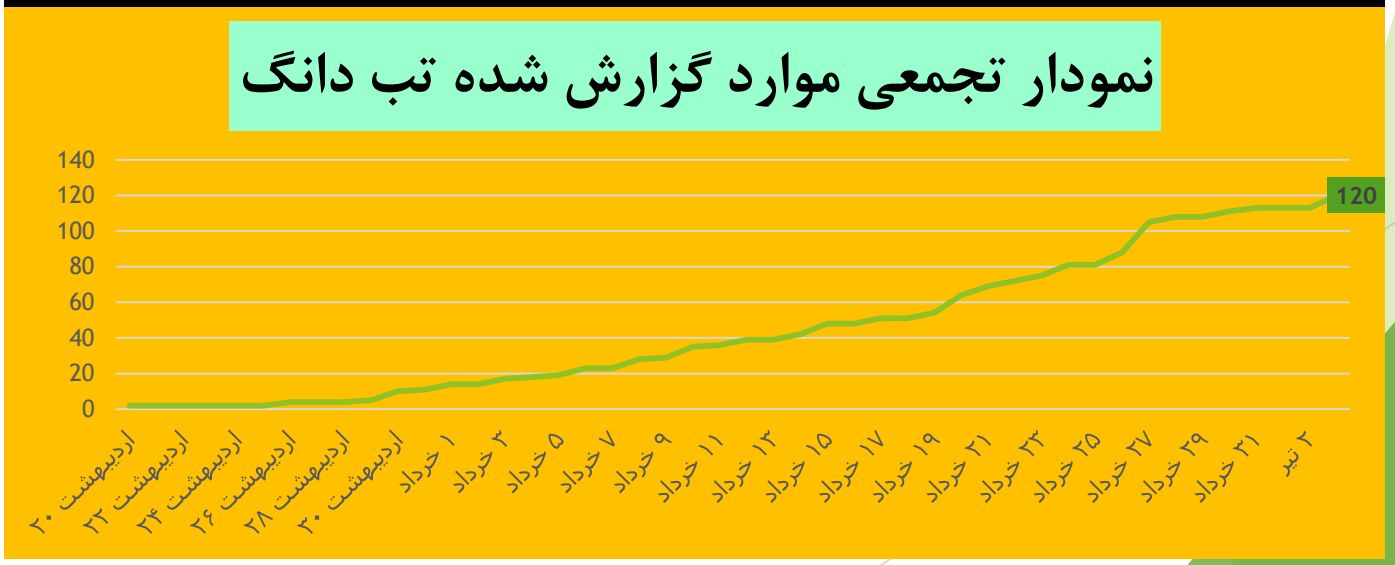
The rise in the number of reported cases as a result of improved diagnosis may also be contributing to the rise in dengue fever cases

The scale of the situation is large, but also small. The evolution of major diseases, unprecedented rainfall, massive infrastructure improvements, and increased publicity due to the development of medical facilities are responsible for people’s experiences.

Local Iranian Case Series Report

روند کشف بیماران تب دانگ در سال ۱۴۰۳





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Patients Review

Between 1403/3/13 and 1403/4/2(20 days), were performed a retrospective analysis of all RDT confirmed cases of EDS as per WHO definition criteria ,without history of travel, who were reported to the ICDC(Tehran).

All cases of classical dengue fever, Chills,fever, and myalgia, headache without any atypical features were excluded from this study.

Living place of 7 patients: Lenge port

Reporter by:

Medical University of Bandar abbas

Epidemiological, History of travel,Clinical, laboratory, and relevant radiological reports were collected and analyzed.

Approach details and outcomes were duly recorded

Introduction of Cases

Case No.	Sex	Age	Nationality	Job	History of travel	Start of Sys
1	M	29	Iranian	Shopkeeper	No	1403/3/19
2	M	42	“	Fishery/Guard	No	1403/3/22
3	F	41	“	Housekeeper	No	1403/3/23
4	F	62	“	“	No	1403/3/24
5	M	31	“	Self-employment	No	1403/3/26
6	M	22	“	Fishery	No	1403/3/31
7	M	17	“	Student	No	1403/4/6

Lab Test Results

Case No.	Alt	Ast	Plt	PT	WBC	RDT	Comment
1	58	40	115,000	12	3,500	IGM	Fully Recovered
2	110	48	90,000	13	2,850	NS1	Fully Recovered
3	69	78	132,000	13.7	4,030	NS1	Fully Recovered
4	38	22	250,000	11.5	9,740	NS1	Fully Recovered
5	50	68	174,000	14.0	1,990	IGM	Fully Recovered
6	48	40	346,000	12.2	3,433	IGM-NS1	Fully Recovered
7	90	113	52,000	14.5	2,987	IGM-	Fully Recovered

In diseases which are infectious the role played by environmental factors is familiar.

Many countries suffer from dengue during the hot, humid, rainy seasons, which attracts mosquitoes and causes short-term infections.

Thank you for your attention!!!