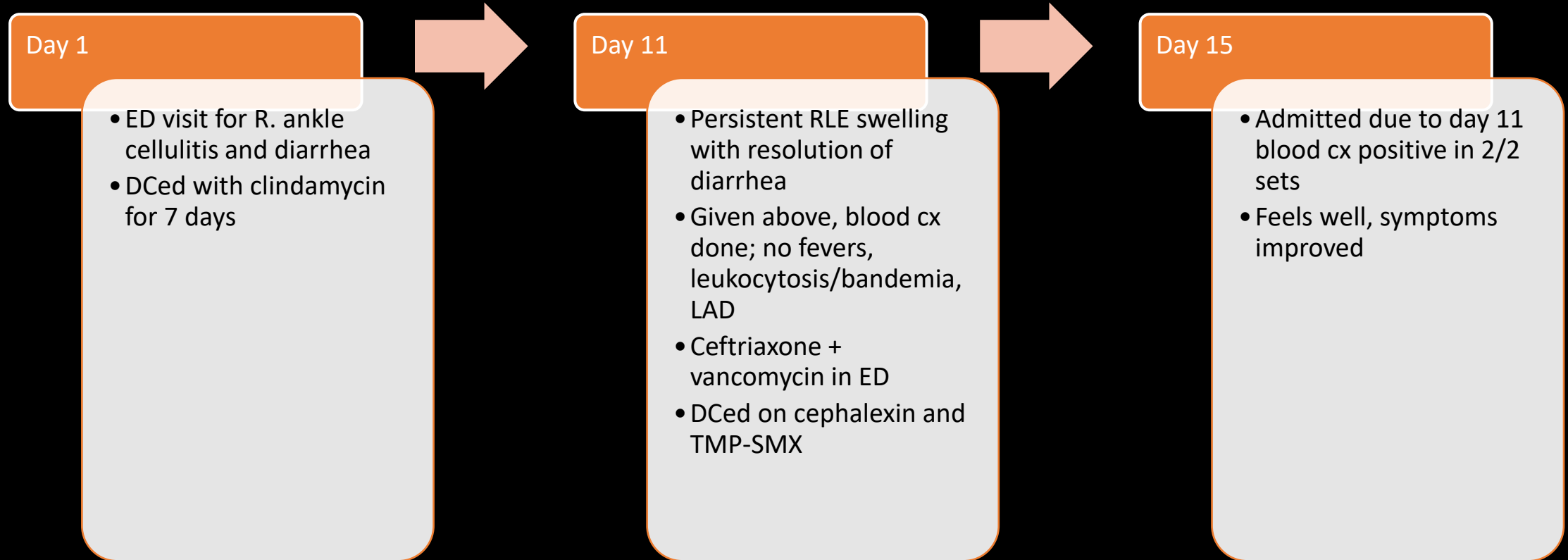




IDAC Case Presentation

Laya Reddy, MD. UC Davis Medical Center

41 yo man with recently diagnosed RLE cellulitis presenting with positive blood cultures.



ROS negative

PMHx/SHx/
FHx

Acute cholecystitis s/p
laparoscopic
cholecystectomy 2019

Obesity (BMI 33)

Medications/Allergies

Cephalexin
(day 4)

TMP-SMX
(day 4)

NKDA

Social

Lives with daughter (12) and wife at home.

Born and raised in Sacramento.
No travel outside country.

1 dog

Non-smoker, no EtOH use, no illicit drug use

PE

Temp 36.5 °C,
BP 121/58, Pulse 65,
RR 16, SpO2 98 %

**General
Appearance:** NAD.

HEENT: Head: AT, NC.
Eyes: EOMI.

Neck: Supple, normal
ROM.

Heart: RRR; no m/r/g

Lungs: CTAB; no
w/r/c

Abdomen: soft, non-
tender. No masses or
organomegaly.

Extremities: no
cyanosis or edema
and distal pulses
normal.

Skin: next slide.

Neuro: No FND.
Gross sensation
intact.

Mental Status: alert
and oriented x 3.



Labs

CBC + CMP wnl

Positive Blood
cx day 11 in
2/2 sets.

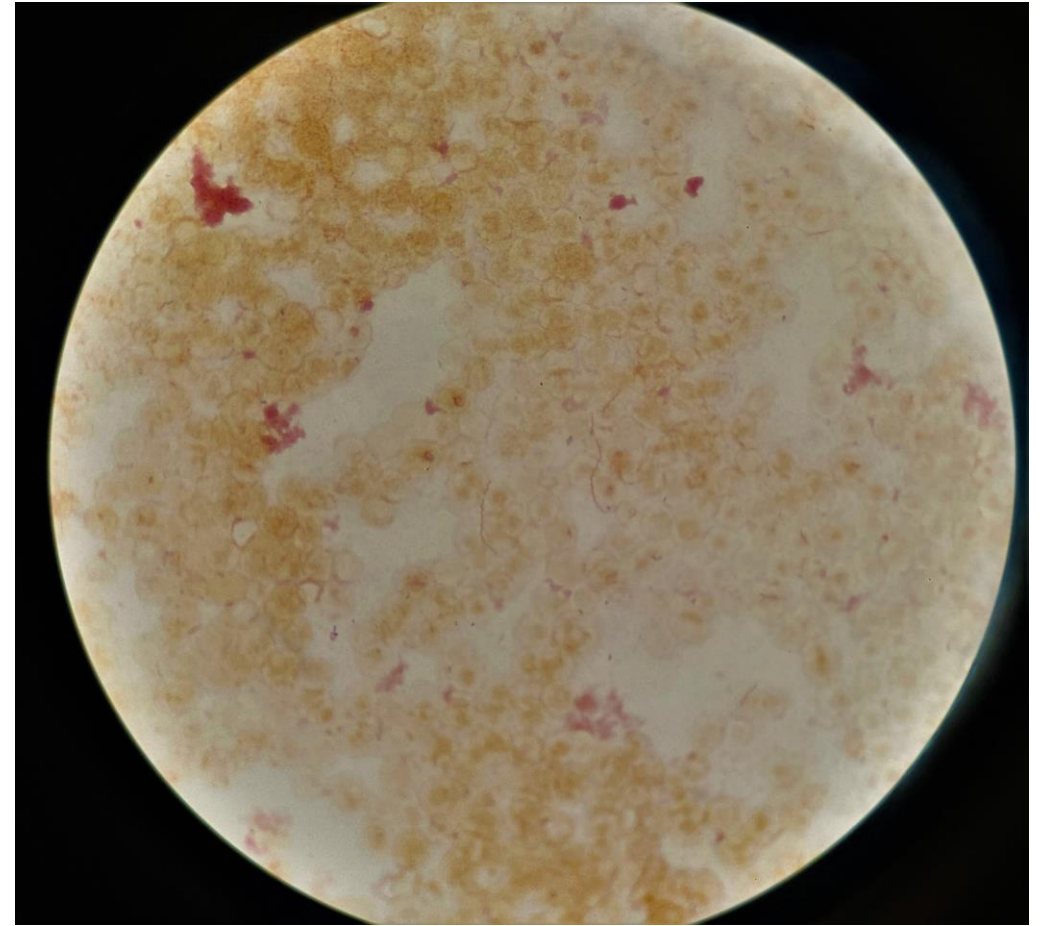
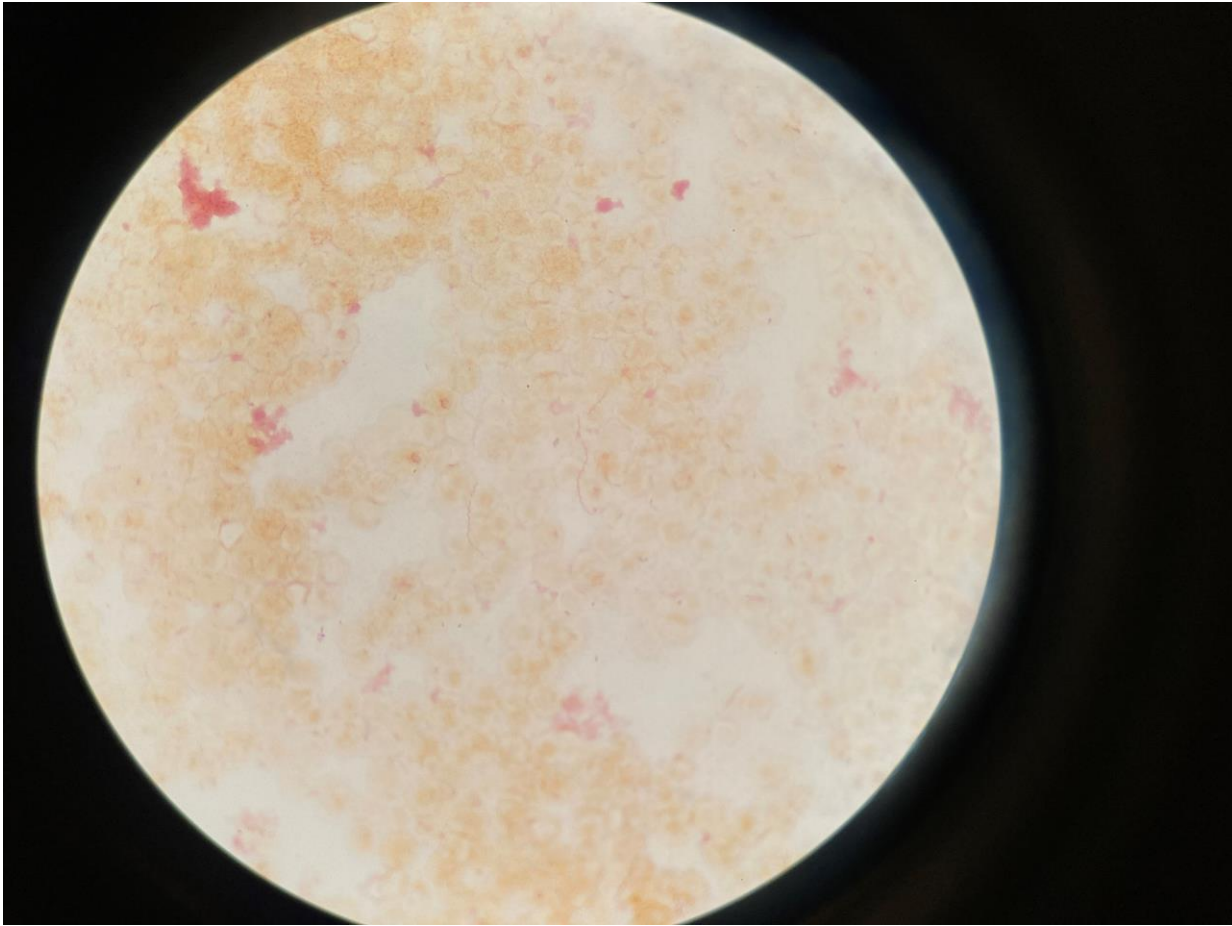
UA - no pyuria



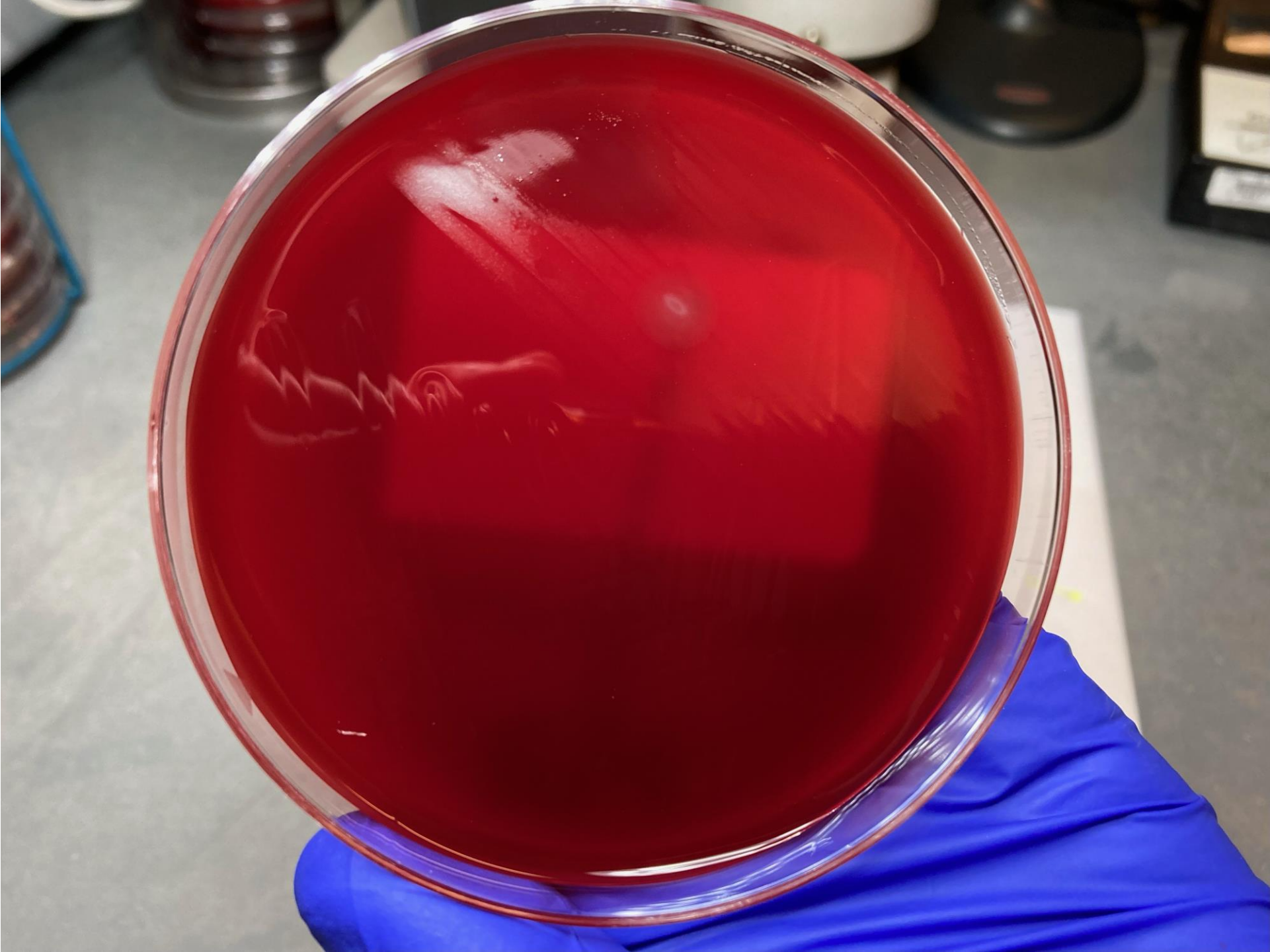
ID consulted for bacteremia which lab is unable to further speciate.

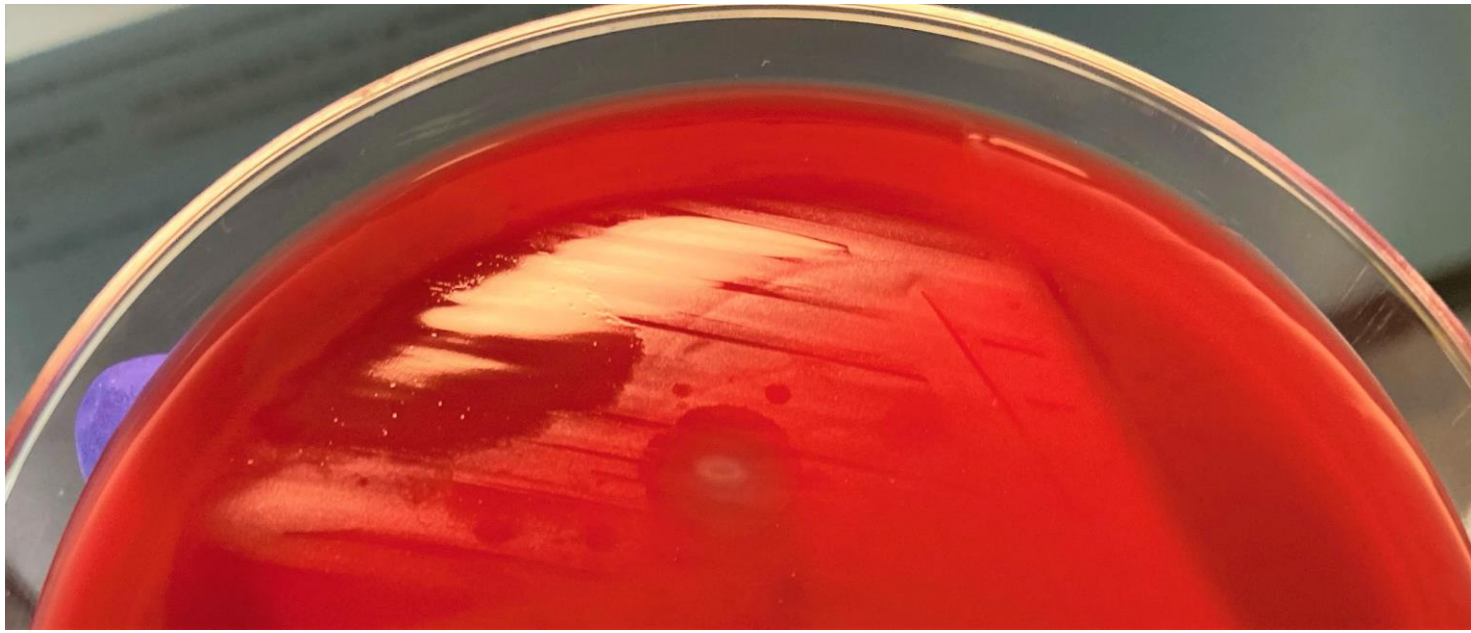
Summary Statement

Previously healthy 41 yo man with recently diagnosed RLE cellulitis and diarrheal illness who presents with bacteremia which the lab is unable to speciate.



DDx?







Finally IDed on MALDI at day 10...
Helicobacter cinaedi

16s RNA Sequencing

Bacteria Sequencing
Specimen Description

Special Requests
Culture

Report Status

Other

Pure Culture

BLOOD RAC

No special requests

Helicobacter cinaedi or Helicobacter bilis
Testing method does not distinguish
between these organisms.

This test was developed and its
performance characteristics determined by
the University of Washington Department of
Laboratory Medicine and Pathology. It has
not been cleared or approved by the US
Food and Drug Administration. This
laboratory is certified under the Clinical
Laboratory Improvement Amendments (CLIA)
as qualified to perform high complexity
clinical laboratory testing. This test is
used for clinical purposes. It should not
be regarded as investigational or for
research.

Final 11/30/2021

The History of *Helicobacter cinaedi*

inhabit intestinal and hepatobiliary tracts of various mammal and bird hosts

transmission not fully understood

Bacteremia caused by *Helicobacter cinaedi* in an AIDS patients

C C Hung ¹, P R Hsueh, M Y Chen, L J Teng, Y C Chen, K T Luh, C Y Chuang

Affiliations + expand

PMID: 9262063


Abstract

Helicobacter cinaedi bacteremia has been infrequently described in homosexual patients with HIV infection. It may recur despite appropriate antimicrobial therapy. We report a bisexual patient with AIDS in whom *H. cinaedi* bacteremia developed and presented with prolonged fever and chronic diarrhea. The symptoms resolved without relapse after intravenous immunoglobulin therapy, which was administered for the treatment of concurrent parvovirus B19-associated anemia, and subsequent treatment with clarithromycin for 14 days.

A close-up photograph of a silver spoon held over a white bowl. The spoon is filled with a variety of pills and capsules, including white tablets, yellow capsules, and brown capsules. The background is a soft-focus view of the bowl containing more of these medications. The overall lighting is bright and clinical.

Treatment?

Improving on ceftriaxone (day 3)



No published guidelines

- In general:
 - ↓ MICs to carbapenems, aminoglycosides, and tetracycline
 - ↑ MICs frequently observed for macrolides and/or quinolones
- Rx 2-6 weeks

Back to our patient...

Cefpodoxime 400
mg PO bid x 10
days

Repeat blood cx
ngtd

Clinically well
without
recurrence thus
far

Prognosis

Generally favorable but recurrence happens...

A row of laboratory test tubes in a rack, with a blurred background. The test tubes are arranged in a white rack and contain a reddish liquid. The background is dark and out of focus, suggesting a laboratory setting.

Take Home Point

Given difficulty in recovering pathogen from blood culture, laboratorians and clinicians should be mindful of potential need for extended culture incubation periods and particular incubation conditions.

Clinical Infectious Diseases

MAJOR ARTICLE



Risk Factors for Recurrent *Helicobacter cinaedi* Bacteremia and the Efficacy of Selective Digestive Decontamination With Kanamycin to Prevent Recurrence

Hideki Araoka,^{1,2,3} Masaru Baba,¹ Chikako Okada,¹ Muneyoshi Kimura,¹ Tomoaki Sato,² Yutaka Yatomi,³ Kyoji Moriya,² and Akiko Yoneyama¹

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Table 1. Clinical Characteristics of the Case Patients

Characteristic	Number (n = 168)
Age, median (range), years	66 (range, 26–88)
Sex	
Male/Female	88/80
Underlying disease	
Solid tumor	48
Hematological malignancy	40
Chronic renal failure	52
Hemodialysis	25
Diabetes mellitus	18
Chronic hepatic diseases	22
Post-orthopedic surgery	5
Respiratory diseases	13
Cardiovascular diseases	6
None	7
Human immunodeficiency virus positive/negative	0/127
Central venous catheter	13
Peripheral venous catheter	58
Cardiovascular device	15
Anticancer chemotherapy within 3 months	63
Within 1 week	46
Within 2 weeks	55
Within 1 month	57
Systemic steroid within 30 days	82
Within 1 week	67
Within 2 weeks	76
>700 mg of prednisone	70
Charlson comorbidity index, median (range)	3 (range, 0–10)
0/1–2/3–4/≥5	12/70/40/46
Pitt bacteremia score, median (range)	0 (range, 0–4)
0/1/2/3/4	120/27/14/4/3
Neutropenia	15
Diarrhea	18
Grade 1/Grade 2/Grade 3	15/1/2
Cellulitis	54

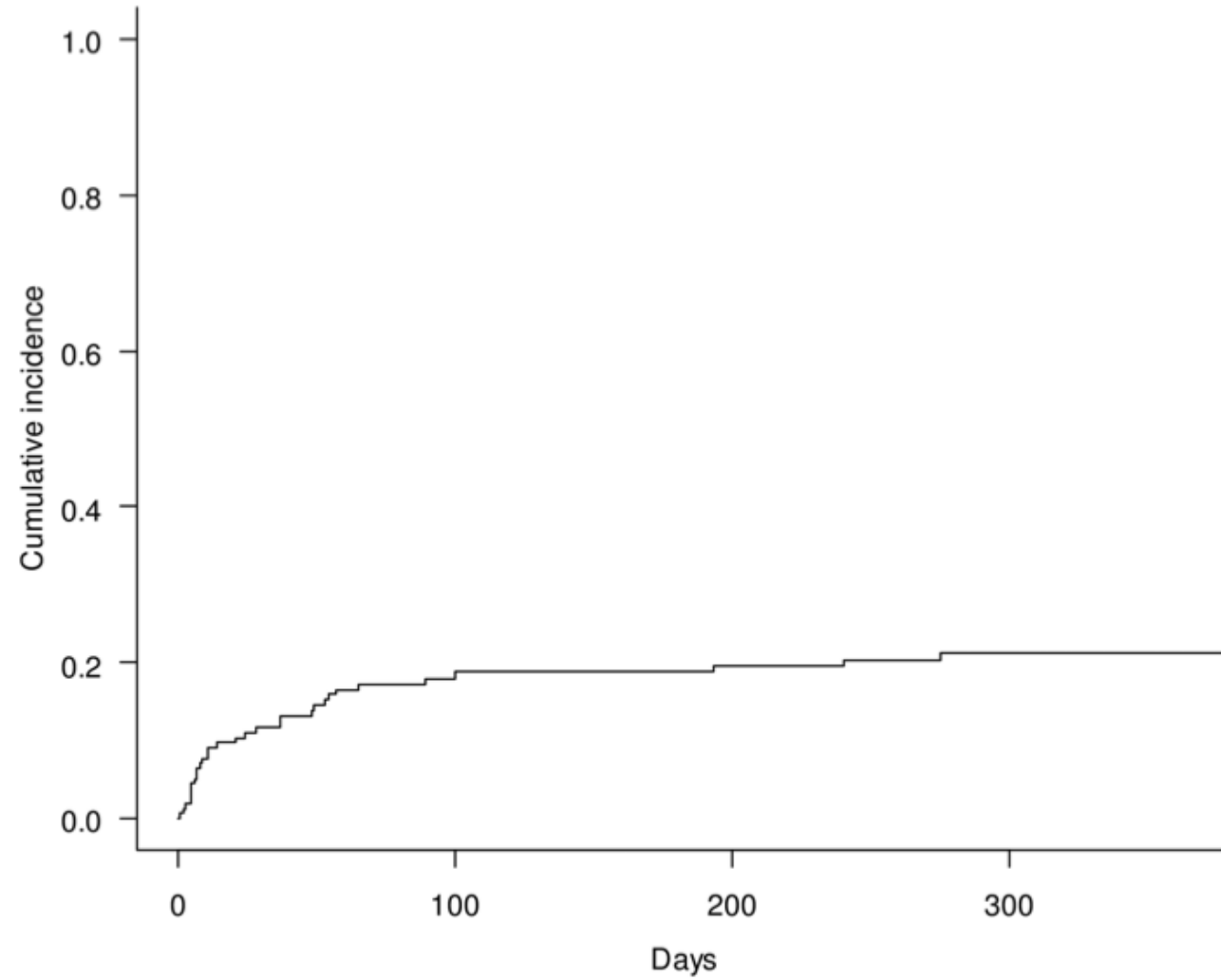


Figure 1. Cumulative incidence curve of recurrent *Helicobacter cinaedi* bacteremia.

Table 2. Univariate and Multivariate Analysis of Factors Associated With Recurrent Bacteremia

Parameter	Number (%) for Group		Univariate Analysis		Multivariate Analysis	
	Recurrence Group (n = 34)	Nonrecurrence Group (n = 134)	HR (95% CI)	PValue	HR(95% CI)	PValue
Age >65 years	15 (44)	75 (56)	0.69 (0.35–1.36)	.28	...	...
Sex (Male)	18 (53)	70 (52)	0.96 (0.49–1.89)	.92	...	...
Underlying diseases						
Solid tumor	7 (21)	41 (31)	0.76 (0.33–1.76)	.52	...	...
Hematological malignancy	16 (47)	24 (18)	3.18 (1.64–6.19)	<.001	NR	...
Chronic renal failure	6 (18)	46 (34)	0.42 (0.17–1.02)	.056	NR	...
Hemodialysis	3 (9)	22 (16)	0.51 (0.15–1.73)	.28	...	...
Diabetes mellitus	2 (6)	16 (12)	0.49 (0.12–2.03)	.33	...	...
Chronic hepatic diseases	1 (3)	21 (16)	0.20 (0.027–1.52)	.12	NR	...
Chronic respiratory diseases	4 (12)	9 (7)	1.46 (0.50–4.24)	.48	...	...
Central venous catheter	1 (3)	12 (9)	0.39 (0.057–2.72)	.34	...	...
Peripheral venous catheter	14 (41)	44 (33)	1.61 (0.82–3.17)	.17	...	...
Cardiovascular device	1 (3)	14 (10)	0.29 (0.039–2.17)	.23	...	...
Anticancer chemotherapy within 3 months	22 (65)	41 (31)	3.75 (1.86–7.58)	<.001	2.47 (1.19–5.12)	.015
Within 1 week	15 (44)	31 (23)	2.50 (1.28–4.89)	.0075	...	...
Within 2 weeks	19 (56)	36 (27)	3.15 (1.61–6.17)	<.001	...	...
Within 4 weeks	19 (56)	38 (28)	3.03 (1.55–5.93)	.0012	...	...
Systemic steroids within 30 days	26 (76)	56 (42)	3.79 (1.70–8.45)	.0011	2.40 (1.03–5.61)	.044
Within 1 week	19 (56)	48 (36)	1.98 (1.01–3.87)	.047	...	...
Within 2 weeks	25 (74)	51 (38)	3.75 (1.74–8.10)	<.001	...	...
>700 mg of prednisone	20 (59)	50 (37)	2.10 (1.06–4.15)	.034	...	...
Pitt bacteremia score ≥1	10 (29)	38 (28)	1.24 (0.59–2.59)	.58	...	...
Charlson comorbidity index ≥5	5 (15)	41 (31)	0.53 (0.21–1.37)	.19	...	...
Neutropenia	4 (12)	11 (8)	1.85 (0.68–5.05)	.23	...	...
Diarrhea	2 (6)	16 (12)	0.60 (0.13–2.68)	.50	...	...
Cellulitis	13 (38)	41 (31)	1.27 (0.64–2.51)	.50	...	...
Antibiotic treatment <21 days	19 (56)	59 (44)	1.80 (0.92–3.50)	.08	NR	...
Antibiotic treatment <14 days	10 (29)	35 (26)	1.34 (0.64–2.77)	.44	...	...
SDD (already started SDD on completion of a course of systemic antimicrobial therapy)	6 (18)	36 (27)	0.46 (0.18–1.18)	.11	NR	...
Stool culture positive	15 (44)	43 (32)	0.86 (0.66–1.13)	.29	...	...
Penicillin-containing regimens	18 (53)	85 (63)	0.69 (0.36–1.35)	.28	...	...
Cephem-containing regimens	15 (44)	55 (41)	1.13 (0.58–2.20)	.73	...	...
Carbapenem-containing regimens	4 (12)	19 (14)	0.83 (0.31–2.24)	.72	...	...
Fluoroquinolone-containing regimens	5 (15)	11 (8)	1.57 (0.60–4.12)	.36	...	...

Abbreviations: CI, confidence interval; HR, hazard ratio; NR, not retained in the multivariate analysis model; SDD, selective digestive decontamination.

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