

Case Number: 722360

<u>Patient Information</u>	<u>Caller Information</u>	<u>Exposure Information</u>
Name: Vincent Adinolfi	Name: Olivia NP	Call Type: Exposure
Phone: dob 5/5/82	Phone: 716-828-2790	Acuity: Unknown
Email Add:	Email Add:	Exposure Duration:
Address 1: The third III	Address 1:	Exposure Reason: Unknown reason
Address 2:	Address 2:	Exposure Site: Own residence
City, State, Zip:	City, State, Zip: Buffalo, NY 14220	Caller Site: Health care facility
PMD:	County: Erie	Caller Site Name: Mercy Hospital
PMD Phone:	Relation To Pat: OHP	Multiple Case Code:
Species: Human		
Animal Type:	Multiple Patients: No	Priority:
Gender: Male	Time of Exposure:	Industry Case: No
Preg Duration:	Number of	Follow-up Number: 13
Age: 40 Years	Substances: 1	
Weight:		

<u>General Information</u>	
Center Code: 88	Medical Outcome:
Initial SPI Code: Cody Unczur	Clinical Effects Duration:
Current SPI Code: Maggie Maher	Free Area 1:
	Free Area 2A:
Case Start Date: 12/6/2022 2:47:50 AM	Free Area 2B: Eggleston
Management Site: Patient already in (enroute to) HCF when PCC called	Free Area 2C:
Enroute to HCF: Admitted to critical care unit	Free Area 3D: Alsakha
Referred to HCF:	Free Area 3E: Schult
Initial HCF: Mercy Hospital	Free Area 3F: Bourgeois
Final HCF:	Primary Center:
Therapy Option:	Override Flag: No

Description:
Verbatim:

Substance(s)

1) Metformin <i>metformin</i>	Formulation: Solid (tablets / capsules /
Quantity: unknown	Dose:
Certainty: estimate	Concentration:
PDX Code: 8155693	Result:
Generic: 0201118	

<u>Routes of Exposure:</u>	<u>Clinical Effects:</u>	<u>Therapies:</u>
Unknown	Hypotension (Related) Ammonia elevation (Unknown if related) AST, ALT>100<=1,000 (Unknown if related) Acidosis (Related) Anion gap increased (Related) Confusion (Related) Dizziness/vertigo (Related) Tremor (Unknown if related)	Continuous Renal Replacement Therapy (CRRT) (R/P) Fluids, IV (P) Intubation (P) Magnesium (P) Opioid analgesia (P) Oxygen (P) Sedation (other) (P) Sodium bicarbonate - metabolic acidosis (R/P) Thiamine (Not) Vasopressors (P) Ventilator (P)

Scenarios:**Notes:**

--- Tue Dec 6, 2022 @ 2:47 By 817:Cody Unczur ---

25216848

Recording Number:

Hospital and Location of Caller: South Buffalo Mercy ICU

Name of Caller: Olivia NP (ICU provider cell #716-431-2061)

Patient Demographics (name, age, sex): Vincent Adinolfi III, 40yo male

Case Number: 722360

Time of ingestion: unknown

Time of presentation to hospital: 2300

Subjective information about the ingestion history: 40yo male arrives to ED from a local group home with confusion and a 2 week history of vertigo with falls. Pt found to be hypotensive with severe undifferentiated metabolic acidosis, now admitted to ICU, requiring 2 vasopressors (levophed, phenylephrine). ICU team unclear if an overdose was involved, but concerned about clozapine and metformin on med list.

PMH: home rx includes clozapine, lipitor, gemfibrozil, levothyroxine, lisinopril, metformin, piaglitazone. NP unable to contact group home staff, but it was reported that patient does have access to his own meds there

Mental status: confused

Fingerstick glucose:

Vital signs: 90/43 HR 100 RR 33 97% RA afebrile

ECG: QRS 90 QTc 435

Pupils: wnl

Skin: wnl

Bowel sounds: wnl

Reflexes/Muscle tone: tremors, twitching

Interventions done already by hospital: 3L IVF bolus (total), IV Mg replaced, currently on levophed and phenylephrine

Labs obtained:

Initial labs @ 2322

132/4.9/97/10/26/3.10<146

(baseline Cr from prev encounter was 0.8)

AG 25

AST 118

ALT 68

Albumin 3.3

TBili 0.9

Ca 8.3

CK 172

Ammonia 84

VBG pH 7.27 CO2 20 O2 68 HCO3 <10

LA 9.7 mmol/L

BHB pending

Serum osm pending

ASA, APAP, EtOH negative

EG, MeOH sent to Kaleida, pending

Urine ketones negative

Repeat Labs pending

Assessment and Plan: 40yo male arrives with 2 week history of vertigo and falls. Pt is confused on arrival, with hypotension, tachypnea, metabolic acidosis, AKI. Pt currently admitted to ICU, requiring 2 vasopressors. EKG intervals narrow.

Discussed with caller that MALA is high on differential, concerns with LA approaching 10mmol/L, Bicarb of 10 and AKI

PCC recs

-Repeat CMP, VBG, LA

Will send to tox

--- Tue Dec 6, 2022 @ 3:14 By 817:Cody Unczur ---

Case sent to Dr. Alsakha and Dr. Schult

--- Tue Dec 6, 2022 @ 3:35 By 817:Cody Unczur ---

Response from Dr. Alsakha below:

Good morning
Case reviewed and discussed with Dr Schult around 0328

- would recommend to consult nephrology for HD
- start bicarb drip
- trend LFTs, if going up then start NAC
- follow up results of TA, NO Fomepizole for now
- agree with repeating labs after resuscitation with fluids

Sincerely,

Ahmed Alsakha, MD, FRCPC, FAAEM, FACEP, dABEM
Medical Toxicology Fellow
SUNY Upstate Medical University

On Dec 6, 2022, at 03:14, POISON <POISON@upstate.edu> wrote:

?

Good evening,

40yo male with acidosis, AKI, hypotension requiring 2 pressors. Concerns for MALA (metformin on med list)

Thoughts on recommending nephro consult/HD? Any other recommendations at this time?

Thanks!

-Cody

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Ca 8.3
CK 172
Ammonia 84

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LA 9.7 mmol/L
BHB pending
Serum osm pending

ASA, APAP, EtOH negative
EG, MeOH sent to Kaleida, pending
Urine ketones negative

Repeat Labs pending

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Discussed with caller that MALA is high on differential, concerns with LA approaching 10mmol/L, Bicarb of 10 and AKI

PCC recs
-Repeat CMP, VBG, LA

Will send to tox

--- Tue Dec 6, 2022 @ 3:37 By 817:Cody Unczur ---

Call to Olivia NP (716-431-2061), reviewed recs as above, ICU team agreeable with plan

PCC following

--- Tue Dec 6, 2022 @ 5:38 By 817:Cody Unczur ---

Call to ICU, spoke with Olivia RN. Pt is now intubated, with 3 pressors (levophed, phenylephrine, vasopressin), and art line in place. Nephro consulted and has recommended CRRT, pending vascath placement.

VS 101/51 HR 91 RR 34 100% on vent

IVF/gtts-

2 amps bicarb given, now on 150meq bicarb in 1L D5W at 150mL/hr

Labs (@0311, prior to intubation)

134/5.9/102/6/27/3.07<121

AG 26

AST 91

ALT 54

Ca 7.8

Albumin 2.8

Bili 0.8

VBG pH 7.05 CO2 19 O2 54 HCO3 <10

LA 10.8mmol/L

From initial labs

Serum osm 308

Calc osm 281

Osm gap 27

BHB 3.6

Repeat VBG ordered for 0600

nnr. Will update tox

--- Tue Dec 6, 2022 @ 5:56 By 817:Cody Unczur ---

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Update sent to Dr. Alsakha and Dr. **Schult****--- Tue Dec 6, 2022 @ 6:03 By 817:Cody Unczur ---**

Response from Dr. Alsakha:

Thank you for the update

IHD if the preferred modality
They don't need to remove fluid if the argument for not using it

Sincerely,

Ahmed Alsakha, MD, FRCPC, FAAEM, FACEP, dABEM
Medical Toxicology Fellow
SUNY Upstate Medical University

On Dec 6, 2022, at 05:55, POISON <POISON@upstate.edu> wrote:

?

Just a brief update on this case, note below

Pt now intubated, on 3 pressors. 2 amp bicarb bolus given, drip started. LA climbing (now 10.8mmol/L). Nephro was consulted, and CRRT is being started

Thanks!

-Cody

--- Tue Dec 6, 2022 @ 5:38 By 817:Cody Unczur ---

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Ca 7.8

Albumin 2.8

Bili 0.8

VBG pH 7.05 CO2 19 O2 54 HCO3 <10

LA 10.8mmol/L

From initial labs

Serum osm 308

Calc osm 281

Osm gap 27

BHB 3.6

Repeat VBG ordered for 0600

nnr. Will update **tox****--- Tue Dec 6, 2022 @ 12:02 By 131:Kayla Bourgeois ---**

The following note was drafted by ICU Rotator Dr. Nyab Ahmed. Edited accordingly by myself. Reviewed/discussed with Dr. Eggleston

Subjective:

Spoke with Sarah, NP with ICU. She is not the primary provider for the patient but she was able to provide updates. Patient continues to

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be intubated and sedated with ketamine and fentanyl. He is also continuing to require vasopressor support. He has been assessed by nephrology and currently awaiting start of CRRT; line being placed

Objective:

Continues to have soft blood pressures. CCNP values

Labs from 7 am 12/6/22:

Na 133, K 5.7, BUN 33, Cr 3.13, BG 294 Anion gap 25

blood gas pH 7.16, pCO2 20, HCO3 7.1

AST 91, ALT 51

Repeat Lactate **pending** (last was 10.8)

Toxic Alcohol levels **pending**

Vasopressors:

Norepinephrine @ 1 mcg/kg/min

Vasopressin @ 0.03

Phenylephrine @ 276 mcg/min

Ventilator:

FiO2 80%, PEEP

A/P

40M from group home with suspected MALA vs toxic alcohol with hypotension(on vasopressors), HAGMA, and renal impairment set to undergo **CRRT**. Intubated/sedated.

With regard to dialysis, would prefer iHD as removal of lactate and/or metformin with correction of acidosis would be expedited when compared to CRRT. This is a volume neutral intervention thus should not worsen the hypotension from my understanding. Team may consider additional interventions of IV thiamine administration. Would also obtain a lithium level and thyroid function given the initial presentation. Cannot rule out toxic alcohols at this time.

Uncertain of the cause of the presentation leading up to hospitalization such as vertigo, falls and confusion for the preceding 2 weeks. Would continue to explore that when the patient is less acute.

Recommendation

-Continue to trend labs (CMP, lactate, blood gases) every 6 hours. Obtain thyroid panel, and lithium level

-Recommend **iHD** over **CRRT** if tolerable

-Continue supportive care and primary medical management (fluids, pressors, optimizing electrolytes)

Please contact the PC if patient status worsens. And report toxic alcohol levels when they result

Reviewed/discussed with Dr. Eggleston

-- Tue Dec 6, 2022 @ 18:11 By 181:Michelle Carnicelli --

Called ICU 716-828-2841, spoke to Danielle RN states pt is currently on CRRT.

Pt remains intubated and sedated with Ketamine @ 1, Fentanyl @ 100

Pt was following commands prior to increasing the sedation.

Vaso 0.03

Neo- 3

Levo- 0.6

BP-106/56, MAP-71, HR-113, Sat-100%

Lactic acid- 3.0

INR-1.3

Hgb- 8.9

RBC- 2.78

Hct- 25.7

ABG: 7.44, PCO2-29, PO2-163, Sat-97.8

Carboxy Hgb- 1.5

AM cortisol- 71.5

TSH- 0.75

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B12 >1500

EG/Methanol- negative
Isopropyl- neg

Lithium- not done

No thiamine given today.

Repeat labs just sent

Pt's sister noted that pt does not drink ETOH but is a heavy smoker.
Nicotine patch placed.

PCC gave NNR- will continue to follow.

--- Wed Dec 7, 2022 @ 1:51 By 181:Michelle Carnicelli ---

Called ICU 716-828-2841 spoke to Jotsia- states pt remains intubated and sedated with:
Ketamine 1.5
Fentanyl at 150

HR-93, R-20, BP-117/71, MAP-87

CRRT continues

Neo- 0.5
Levo- 0.2

Labs at 2200
Lactic acid- 1.9 mmol/L

Labs will be repeated in AM

PCC gave NNR at this time.

--- Wed Dec 7, 2022 @ 10:18 By 142:Maggie Maher ---

TC to ICU, spoke with RN care

Pt remains intubated and sedated with Fentanyl and Ketamine. Sedation is being decreased

MS: coming down on sedation, waking up more, starting to follow commands

VS: 96, 111/62, MAP 79, 100% on Vent, T max yster 38.7, afeb

CRRT has been discontinued
Pressors are currently off
All electrolytes are being replaced
Only IVF are with sedation

Labs obtained this am
Lactate 1.5 mmol/L
ABG pH 7.57, PCO2 28, bicarb 25.7
BMP 139/3.4/104/25/12/0.99
Glucose 131
Ca 7
Phos 1.6
Mg 1.4
AST 87

Center Name: Upstate New York Poison Center

Center Code: 88

Case Number: 722360

ALT 46

A/P pt is overall improved. Acidosis has resolved. Renal function is now normal. Plan to wean sedation and extubate as pt tolerates.

PC following for outcome. Call back with questions, changes in pt condition.