

Dark Grape Juice for Managing Thick Secretions

An exploratory study of patient perception

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Dark Grape Juice did not convincingly impact self-rated secretion thickness measures, yet most participants gave positive feedback about using it.

Background

- Sips of dark grape juice are recommended by up to 83% of SPs to thin ropery secretions (Carmen et al., 2010)
- Multiple textbooks also recommend its use (Jackson, 2009; Krivokas & Carter, 2005; Scott & Johnson, 1993; Wagner-Sonntag, 2014)
- The authors could find no research of any kind on dark grape juice for thick secretions
- This study investigated patient perceptions of dark grape juice effects on thick secretions
- An ABA reversal design was employed using subjective, self-rated outcome measures.
- Each phase lasted 3 days, chosen *a priori* as there is no previous research in this area.

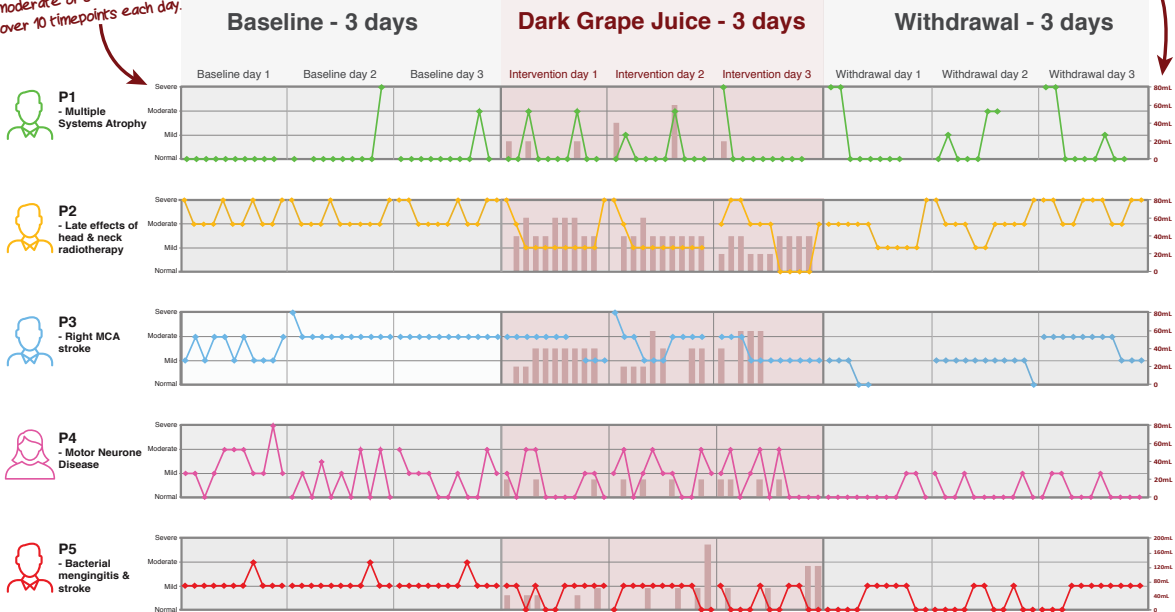
Results

- **Self-rated saliva thickness** - P2 and P5 showed improvement from baseline to intervention phases, but Tau-U effect sizes were small-moderate (0.605, 0.449)
- **Oral quality of life** - Only P2 demonstrated a strong change in oral quality of life
- **Participant feedback** - Largely positive perspectives with 4/5 planning to continue using dark grape juice

Line graphs: Self-rated severity of saliva thickness - normal, mild, moderate or severe. Rated over 10 timepoints each day.

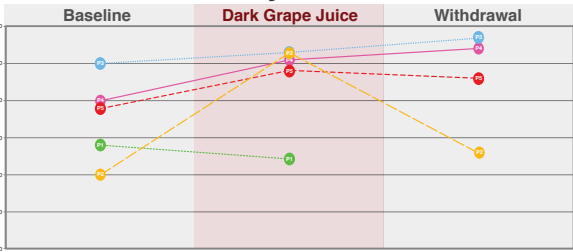
Self-rated saliva thickness scale

Bar graphs: Millilitres of grape consumed (taken in 20mL doses as desired)



Oral Quality of Life scale

Better oral quality of life



Participant feedback

	What did you think of using the DGJ?	What did you notice when drinking the DGJ?	Do you plan to continue with its use?	Were there any downsides to drinking the DGJ?	Would you recommend for thick secretions?
P1	I'd use it again, it tastes alright	It stopped the dryness/stickiness, it cut through it	Yes	Nope	Yes
P2	I thought it was very good	It helped to bring up the saliva almost instantaneously.	I already have	It felt harsh on the throat, but the more I drank the less harsh it felt. Also, I don't like grape juice	Definitely
P3	Saliva became more aerated but less ropery as the day went on. Easier to drink than water.	There wasn't much of a change with my saliva. Wife: He didn't use so many tissues to spit out saliva (approx. half of what he was using previously); seemed to be swallowing saliva more than spitting it out. He also didn't clear his throat as much	Probably not. Wife: I am trying to convince him to keep using it.	Not really - I'm not sure what it would have done to my sugar levels.	If ropery, it might help. But my saliva wasn't that ropery to be honest.
P4	I had some relief while using it, but this dissipated quite quickly	When I had grape juice before brushing m teeth, it reduced my amount of mucous - there was less mucous generated. The grape juice cut through my mucous - it broke it up at the time and reduced the output.	Yes	No	Not as a sure remedy. A cotton hanky is more effective at absorbing the saliva completely.
P5	Was good - seemed to clear my throat up.	Not much to start with, but as time went on it was easier to do things like swallow food. Also helped not to choke on mucous. Occasionally it came back, but a sip or two and it went away again. Lasted 1-2hrs each time (I had a sip).	Yep	Not really	Yes

Possible explanations

1. Placebo effect?

There was not convincing evidence of improvement, yet most participants felt they had benefited from the dark grape juice and planned to continue consuming it. This might suggest a placebo effect.

2. Specific diagnoses only?

P2, who had secretion changes due to late radiotherapy effects, improved most across measures. He was also the only non-neurological diagnosis. Further research in radiotherapy patients may be warranted given the high rates of thick secretions from mucositis.

3. Insensitive outcomes?

There are no validated scales for saliva thickness and the outcome measures in this study had to be adapted from other tools. More sensitive outcomes may better detect change

Conclusions

- This research assessed *patient perceptions* of dark grape juice and thus, results cannot objectively determine its ability to thin secretions.
- Nevertheless, some participants feel dark grape juice to be beneficial despite limited change in self-ratings.
- Given positive perceptions, further research is indicated into this often-prescribed remedy to progress toward evidence-based treatments.
- A study using a placebo drink of similar taste and appearance to dark grape juice would help determine the true effect of dark grape juice on thick secretions.
- A placebo drink would also control for the potential confound of increased fluid intake.
- Head and neck radiotherapy patients may be an ideal target population group to include within such a study.