

Comparision the effects of vantris and deflux in treatment of vesico uretral reflux

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- Patients with persistent reflux or scar and frequent febrile UTI despite antibiotic prophylaxis, surgery or endoscopic intervention may be done.
- Endoscopic correction of VUR in comparison with other methods is more safe, and less invasive.
- The FDA approved agent used in this method is **Deflux** but recently a new agent has been introduced is **Vantris**.

The benefits of Vantris includes:

- 1. Fibrotic capsule formation around it remains for years because of its synthetic formula.
- 2. Laboratory studies indicates it's not cytotoxicity and non-mutagenicity.
- Some studies shows that using of Vantris as a bulking agent can be more safe and effective.
- There is less experience about comparison of these two agents we aimed to resemble the effectiveness of these two agents in healing VUR.

- The study participants were 98 patients who were selected from those referred to Mottahary hospital, Urmia, North West of Iran.
- They accidentally were divided in 2 groups.
- Injection of Vanutris and Deflux was done randomly for all patients and they underwent 6 months follow up including clinical and Imaging evaluation.

- UTI 2 times during 6 months in spite of receiving antibiotic and VUR grade 3 and upper that they have not healed during 5 years enrolled this study.
- Follow up done every 2 months till 6 month with urine analyses and sonography and at the end of 6 months cystography .

- After 6 months frequently distribution of healing of reflux respectively between Vantris and Deflux was 55 (73.3%) and 59 (78.7%).
- There were no significant difference between 2 groups.

Voiding dysfunction

- 1 month after injection of Vantris 12 (16%) patients had urgency, 8 (10.7%) had urge incontinency, 8 (10.7%) had supra pubic pain, but in Deflux group 3 (4%) had urgency, 1 (1.3%) had urge incontinency, and 1 (1.3%) had supra pubic pain, that between 2 groups there was significant difference. ($p < 0.005$)
- But after 6 months of intervention just urgency was meaningful because 4 patients in Vantris and none in Deflux involved with it.

DTPA SCAN

- **Vantis** ; 3 pat
- one obs pattern tow other pat sig stasis
- **Deflux** : 4 pat
- one obs pattern Tree pat non obs sig stasis

Reflux grading in left kidney

		Group		Total
		Deflux	Vantris	
reflux_left1	not	5(/.2/10)	7(/.0/14)	12 (/./12)
	maderat	4(/.2/8)	1(/.0/2)	5 (/./5)
	maderate to sever	25(/.51)	24(/.0/48)	49(/.5/49)
	severe	15(/.6/30)	18(/.0/36)	33(/.6/33)
p=491/0				

Reflux grading in right

		Group		Total
		Deflux	Vantris	
reflux_right1	Not	16 (0.7/32)	13 (0.0/26)	29 (0.3/29)
	maderate	4 (0.1/8)	4 (0.0/8)	8 (0.1/8)
	Maderate to sever	22 (0.9/44)	27 (0.0/54)	49 (0.5/49)
	Severe	7 (0.3/14)	6 (0.0/12)	13 (0.1/13)

Reflux healing after 6 month

			Group		p-value
			Deflux	Vantris	
Reflux	Boy	Recovery	8 (61,6)	11 (%57.9)	06/0
		Nonrecovery	5 (38.54)	8 (%43.1)	
	girl	Recovery	00 (%82)	44 (%78.6)	49/0
		non-recovery	11 (%18)	12 (%21.4)	

Hydronephrosis R kidney 6 month

		group		Total
		Deflux	Vantris	
RRPD1	Mild	41 (/3/95)	24 (/3/92)	65 (/2/94)
	Medium	2 (/7/4)	2 (/7/7)	4 (/1/5)
	Severe	-	-	-
p = 6/0				

Hydronephrosis L kidney 6 month

		Group		Total
		Deflux	Vantris	
LRPD	Mild	39 (/9/92)	22 (/7/91)	61 (/4/92)
	Medium	2 (/1/4)	1 (/2/4)	3 (/5/4)
	Severe	1 (/4/2)	1 (/2/4)	2 (/3)
p = 916/0				

- One of the disadvantages attributed to Deflux is the loss of 20% of the injected material over time (a result of absorption of the hyaluronic acid), which may explain the lower success rate of the endoscopic treatment of VUR compared with open surgery.
- In 2005, Polyacrylate Polyalcohol (VantrisR), a non-absorbable chemical preparation was introduced for endoscopic treatment of VUR, aiming to improve on the results of Deflux by preventing volume loss.
- Preliminary results of follow-up using Vantris have shown high a level of reflux resolution

- Ureteral obstruction suggested the only significant, but serious complication after vantis injection correcting high grade reflux, which required ureteral re-implantation.

- The obstruction following endoscopic correction of VUR is related to the anatomical features of the UVJ rather than the type of material used for endoscopic correction.
- New data indicated that Vantris injection does not lead to ureteral fibrosis or inflammatory changes and therefore does not seem to increase the incidence of UVJ obstruction.

- Upon on other studies the success rate with Vantris ranges between 83-88%. but this rate with Deflux is 74-83%.
- Therefore despite more complaints of Vantris (could be ignored) and high price of Deflux in Iran, Vantris can be preferred.

