Usefulness of high-resolution ultrasonography in the evaluation of perianal abscess and prediction of recurrence

Department of Pediatric Surgery, Showa Medical University school of medicine, Tokyo, Japan

Hideaki Sato, Sei Adachi, Miri Tominaga, Shota Kimura, Shunsuke Osawa, Ai Tayama, Noriyoshi Nakayama, Yu Watarai

Background

Perianal abscess (PA) is a common disease with a high risk of recurrence. This study aimed to longitudinally evaluate perianal abscesses using high-resolution ultrasonography to predict recurrence

Materials and Methods

The records of 38 patients with PA admitted between 2022 and 2024 were reviewed by comparing their age, treatment, ultrasound findings, and prognosis.

Results

Patients characteristics

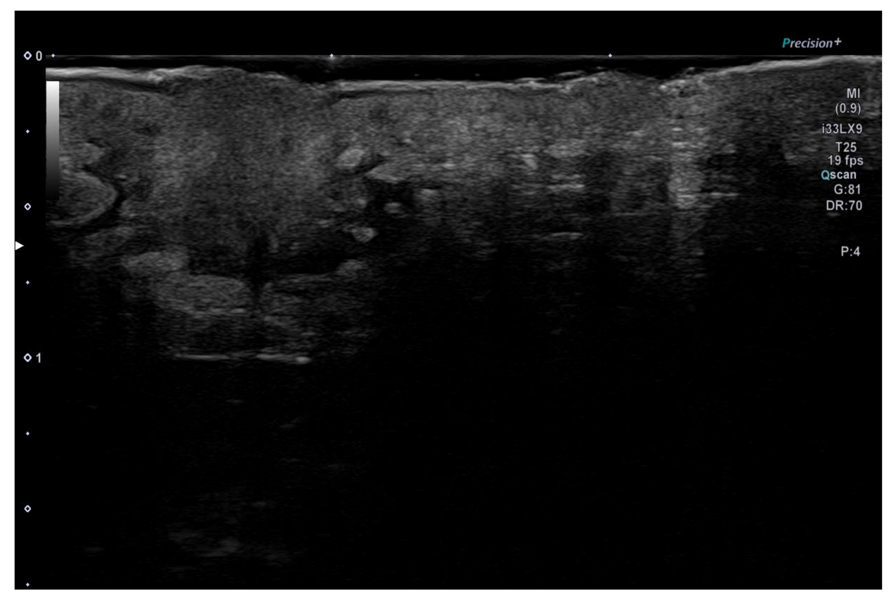
Mean age: **4.94 month**

The initial treatment: Puncture **7 cases**
Kampo medicine TJ122 **26 cases**
Kampo medicine TJ48 **3 cases**
Observation **2 cases**

Recurrence: **9 cases, averaged 3 times**

Ultrasound applied for 23 initial cases (longitudinal follow-up in 17 cases)

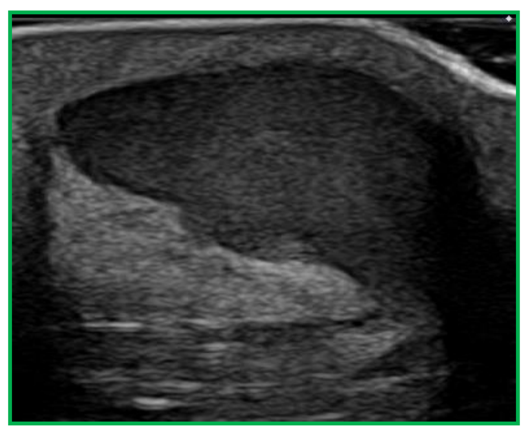
Ultrasound : Canon Aplio i800®, 33MHz probe



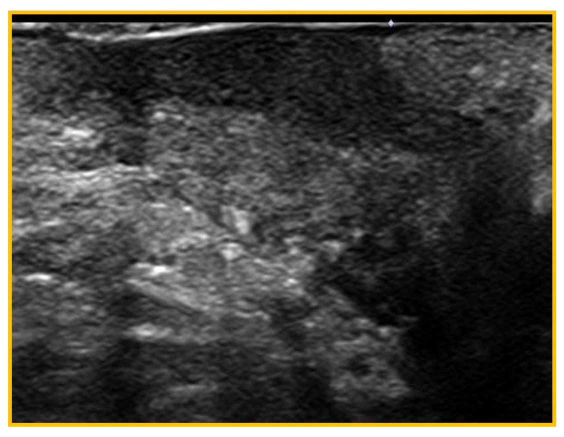
The ultrasound findings classification

Low uniform (LU)

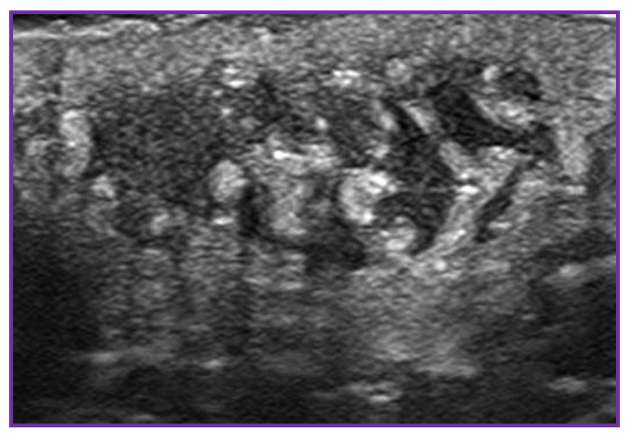
Iso uniform (IU)



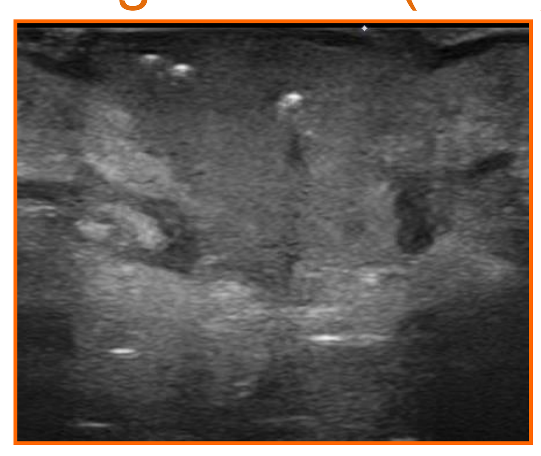
Low/Iso mixed (LIM)



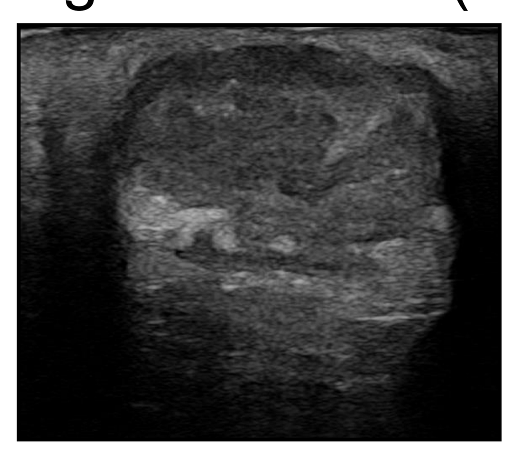
Low/High mixed (LHM)



Iso /High mixed (IHM)



Low/High/Iso mixed (LHIM)



Initially findings	LU	IU	LIM	LHM	IHM	LHIM
Cases (n)	**4**	**2**	**4**	**2**	**1**	**4**
Recurrence (n)	**3**	**2**	**2**	**0**	**0**	**1**

Age 0-5month	LU	IU	LIM	LHM	IHM	LHIM
Initial (n)	**3**	**2**	**3**	**1**	**1**	**3**
Recurrence (n)	**3**	**0**	**0**	**0**	**1**	**0**

Age 6-10 month	LU	IU	LIM	LHM	IHM	LHIM
Initial (n)	**3**	**2**	**3**	**1**	**1**	**3**
Recurrence (n)	**3**	**0**	**0**	**0**	**1**	**0**

Scar findings	LU	IU	LIM	LHM	IHM	LHIM
Cases (n)	1	10	18	0	3	0
Recurrence (n)	0	1	10	0	0	0

Discussion

・ After conservative treatment, the rate of fistula formation, abscess recurrence, and new onset abscess were 15.0%, 4.6%, and 6.5%, respectively.

Wanbin Y et al. Nature Sci Rep. 2023 Oct 27;13(1):18416.

・ To predict prognosis, each findings should be classified according to the presence or absence of inflammation, such as blood flow.

Conclusion

Patients aged <5 months formed LU at initial and recurrence, with a risk of recurrences. Although the perianal abscess appearance had been scar formation, ultrasound findings revealed the possibility of recurrences especially including low echoic area.

Conflict of Interest Disclose Main Author: Hideaki Sato
In relation to this presentation, There is no COI to be disclosed.

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