

# Lactotroph pituitary neuroendocrine tumor treatment

Treatment is indicated to correct [hypogonadism](#), restore other hormonal deficits, and alleviate local mass effects <sup>1)</sup>

## Controversies

### Are dopamine agonists still the first-choice treatment for prolactinoma in the era of endoscopy?

Can et al. suggested that neurosurgeons and endocrinologists has to conduct high-quality clinical trials to address the clinical equipoise quantitatively <sup>2)</sup>.

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Surgical intervention may resurface as an alternative first-line treatment. When used in combination with cabergoline, surgery offers a higher disease remission rate than either drug or operation alone <sup>3)</sup>

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[Lactotroph Adenoma Surgery](#) is safe and efficient. It is particularly suitable for [enclosed prolactinomas](#). The patient should be well informed of the pros and cons of the treatment options, which include [dopamine agonist](#) (DA) and [transsphenoidal microsurgery](#), and the patient's preference should be taken into account during decision-making <sup>4)</sup>.

In the absence of [visual deficits](#), [pituitary apoplexy](#) in [lactotroph adenomas](#) is the only type of [pituitary tumor](#) for which [medical therapy](#) (Dopamine agonists) may be the primary treatment.

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Issues and questions to be addressed in this approach to long-term management of prolactinomas include the frequency of radiographic monitoring, effect of pregnancy and menopause, safety of estrogen in women taking oral contraceptives, and the potential for discontinuation of dopamine agonist therapy <sup>5)</sup>.

## Lactotroph pituitary neuroendocrine tumor medical treatment

[Lactotroph pituitary neuroendocrine tumor medical treatment](#)

## Surgery

see [Lactotroph Adenoma Surgery](#)

## Radiosurgery

[Lactotroph adenoma radiosurgery](#).

## Serial imaging

The underlying decision to perform serial imaging in prolactinoma patients should be individualized on a case-by-case basis. Future studies should focus on alternative imaging methods and/or contrast agents <sup>6)</sup>.

## References

<sup>1)</sup> Bloomgarden E, Molitch ME. Surgical treatment of prolactinomas: cons. Endocrine. 2014 Dec;47(3):730-3. doi: 10.1007/s12020-014-0369-9. Epub 2014 Aug 12. PMID: 25112227.

<sup>2)</sup> Cai X, Zhu J, Yang J, Tang C, Cong Z, Ma C. Are dopamine agonists still the first-choice treatment for prolactinoma in the era of endoscopy? A systematic review and meta-analysis. Chin Neurosurg J. 2022 Apr 8;8(1):9. doi: 10.1186/s41016-022-00277-1. PMID: 35395837; PMCID: PMC8994364.

<sup>3)</sup> Chen TY, Lee CH, Yang MY, Shen CC, Yang YP, Chien Y, Huang YF, Lai CM, Cheng WY. Treatment of Hyperprolactinemia: A Single-Institute Experience. J Chin Med Assoc. 2021 Jul 13. doi: 10.1097/JCMA.0000000000000584. Epub ahead of print. PMID: 34261980.

<sup>4)</sup> Giese S, Nasi-Kordhshti I, Honegger J. Outcomes of Transsphenoidal Microsurgery for Prolactinomas - A Contemporary Series of 162 Cases. Exp Clin Endocrinol Diabetes. 2021 Jan 18. doi: 10.1055/a-1247-4908. Epub ahead of print. PMID: 33461233.

<sup>5)</sup> Schlechte JA. Long-term management of prolactinomas. J Clin Endocrinol Metab. 2007 Aug;92(8):2861-5. Review. PubMed PMID: 17682084.

<sup>6)</sup> Varlamov EV, Hinojosa-Amaya JM, Fleseriu M. Magnetic resonance imaging in the management of prolactinomas; a review of the evidence. Pituitary. 2019 Oct 28. doi: 10.1007/s11102-019-01001-6. [Epub ahead of print] Review. PubMed PMID: 31659622.



