

Incurable diseases

Incurable disease is a disease that current medicine cannot cure. In some cases, long-term compensation can be achieved, sometimes to slow the progression of the disease (*disease modifying drugs*) and sometimes to suppress symptoms (*symptomatic therapy*).

Examples

Incurable diseases are a relatively **broad group** of diseases found in virtually every branch of medicine. It includes diseases that, with proper pharmacological compensation, may not limit the patient and worsen their prognosis. On the other hand, it also includes diseases in which the patient has an infaust prognosis at diagnosis and current pharmacotherapy can only mitigate or slow the progression of the disease.

Common incurable diseases include:

- arterial hypertension,
- diabetes mellitus,
- certain cancers: malignant melanoma, glioblastoma,
- chronic kidney disease,
- chronic heart failure,
- autoimmune diseases: multiple sclerosis, rheumatoid arthritis,
- neurodegenerative diseases: Alzheimers disease, Parkinsons disease, amyotrophic lateral sclerosis,
- certain infections: HIV, hepatitis B and C.

Typical trajectories

The temporal evolution of individual diseases can be roughly classified into **three typical trajectories**^[1]. In neurology, there is also a **fourth course** typical of severe focal brain lesions^[2]. Knowledge and predictability of possible developments makes it easier to prepare for future complications and facilitates communication with the patient or their loved ones in setting goals of care and advance care planning.

Brief and rapid deterioration after a period of long compensation

For a long period of time, the patient has only **mild symptoms** and the disease is compensated for a long period of time. Subsequently, however, there is a **rapid deterioration** and the patient dies within a relatively short period of time. This trajectory is typical for some tumours. At the time of a breakthrough deterioration, there is often a point at which specialised palliative care is indicated instead of general palliative care.

Long-term limitations with occasional severe exacerbations

Disease symptoms are present **from the beginning** with varying levels of compensation. Over time, there are **intermittent decompensations** that severely limit the patient. Sometimes the decompensation is so severe that the patient must be hospitalized. However, the disease *progresses smoothly*. Patients have various complications up to the point where a breakthrough complication occurs and the patient subsequently dies. This trajectory is typical of organ failures - renal failure, cardiac failure - and some autoimmune diseases - multiple sclerosis, myasthenia gravis.

Gradual prolonged worsening

The patients functional status deteriorates gradually, and within this deterioration there is an additional **fluctuation** depending on current circumstances, e.g. hydration, patients psychological state, environment, infection. The condition slowly reaches death unless some other complication ends the patients life sooner. This trajectory is typical of **neurodegenerative diseases**, dementia and frail geriatric patient syndrome.

Severe focal brain involvement

After a focal disability, the patients functional status is sharply reduced, while it is also a fragile period in which complications (cerebral edema, hemorrhage, infection, thrombosis/embolism) can occur. In the best course, part of the deficit recovers, but part of the deficit remains permanently. With severe complications, the patient dies. Prognostic uncertainty arises, but at a minimum, the following boundaries (best and worst case scenarios) between which progression will occur can be communicated with the patients family. At the same time, the *likely scenario of evolution* lies somewhere in between and often clinical experience rather than data-driven prognostication will help to estimate it.

References

- List of incurable diseases (English Wikipedia)

Related sites

- Goal of Care
- Advance care planning
- Portal:Palliative medicine

References

1. MURRAY, Scott A, Marilyn KENDALL and Kirsty BOYD, et al. Illness trajectories and palliative care. BMJ [online]. 2005, vol. 330, no. 7498, pp. 1007-11, also available from <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC557152/?tool=pubmed>>. ISSN 0959-8138 (print), 1756-1833.
2. CREUTZFELDT, Claire, Benzi KLUGER and Robert HOLLOWAY. Neuroparalytic care : a handbook for improving the lives of patients and families affected by neurological disease. - Ed. Springer, 2018. 312 p. ISBN 9783319932156.