

**FAST FACTS AND CONCEPTS #463**

**PERIMORTEM GAMETE PROCUREMENT AND POSTHUMOUS REPRODUCTION**

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**Background** Requests for *perimortem gamete procurement* (PGP) (also called posthumous gamete procurement in the literature) typically arise by a surrogate decision-maker following the unexpected death or incapacitation of a reproductive-aged individual. An accurate number of births resulting from *posthumous assisted reproduction* (PAR) is difficult to ascertain, however, the prevalence of PGP requests is expected to keep increasing as PAR gains public awareness (1,2). It is rare that patients in this situation have advance directives or wills which address PGP (3). Given the unanticipated nature of situations from which requests for PGP arise, the necessity for immediate action, and the profound grief often surrounding those requests, clinicians who care for the seriously ill should have a working knowledge of the medical, ethical, and legal considerations pertaining to such requests.

**Physiological considerations**

- PGP is most frequently conducted in biological males, in part due to the relative complexity and invasiveness of the procedure in biological females.
- Methods for sperm retrieval include epididymal aspiration, percutaneous testicular biopsy, and testicular excision, though electroejaculation can be used prior to death (4). Oocytes can be retrieved through follicular aspiration and biopsy of ovarian tissue (5).
- Gamete viability decreases following death; hence, PGP should occur within 24-36 hours of death (6).

**Ethical considerations**

- One of the predominant concerns in cases of PGP requests is that of the incapacitated patient's autonomy. Even after death, a person's body continues to command respect and the autonomous wishes of the person carry a degree of weight (7).
- Posthumous reproduction does not necessarily involve the same interests, values, and concerns that reproduction during life entails. Thus, an individual's stated desire to have children during life cannot be simply extrapolated to mean that they wished to have children after death (5).
- Simply heeding the request of a surrogate decision-maker can mark a conflict of interest wherein the decision benefits the proxy more than it reflects the wishes of the deceased (8).
- Clinicians may feel compelled to take action that would alleviate the grief of the surviving party. It is of paramount importance that the clinician separates their empathetic desire to help the surviving party from the autonomous wishes of the decedent (9).

**Guidelines for action**

- There is no governmental regulation surrounding proxy PGP requests in the United States and legal precedent remains conflicted (10,11).
- Guidelines from professional societies including the American Society of Reproductive Medicine (ASRM) and the European Society of Human Reproduction and Embryology (ESHRE) suggest that decisions and policies on this topic should largely be at the discretion of individual institutions, and institutions are not ethically obligated to consider requests (5,12). As such, clinicians should turn to institutional policy, if present, to inform a course of action. These guidelines also state that institutions open to considering PAR requests should only evaluate requests from spouses or other partners who shared a "reproductive relationship," i.e., a relationship involving a shared desire to have children. PGP requests from parents should not be granted, as no joint reproductive project can be said to have existed (5,12). Despite these guidelines, some authors have written in support of parents' ability to request PGP or otherwise engage in PAR technologies on behalf of their children (11,13).

**Considerations for clinicians**

- If PGP/PAR are brought up, clinicians should coordinate with attending physicians to try to ascertain the hopes and worries regarding future reproductive opportunities with the patient's partner/spouse (and the patient if they are able to communicate). Identifying and responding to emotional and/or spiritual distress is essential. Grieving family members should be directed to counseling and emotional support resources, such as spiritual care, psychology, and social work.

- When considering PGP-related requests, the wishes and values of the deceased take precedence. It is important to differentiate between a true, persistent desire to have a biological child, even if the patient will not be alive to raise that child, and expressions of emotional distress and grief at the loss of the ability to parent a child. Some phrases that may help guide this discussion with surrogates include, “When people think about building a family, many things may be important. For example, some strongly desire to be able to experience parenthood and raising a child themselves. For others, they want their partner to experience parenthood and that is most important, even if they are not able to survive. Can you tell me about the most important considerations for [your partner] as you think about this?”
- When considering PGP requests, clinicians should involve urology, reproductive endocrinology, clinicians with a preexisting relationship (e.g., the primary care provider), and other institutional resources (ethics, legal) to ensure standards of professional practice and continuity of care, are being followed.

**Summary** Ideally, a request for PGP or PAR is accompanied by the expressed consent (verbal or written) from the patient. Without this, it may be ethically permissible to consider a request when made by the patient’s partner or spouse. Requests originating from parents should not be considered. In general, there is no ethical obligation to engage in such practices. Individual institutions should develop policies ensuring consistent and ethical practice particularly when the patient’s wishes are not explicitly known; policies can help ensure decision-making is fair and mitigates social prejudices which may affect decision making (10). Palliative care clinicians may be asked to participate in values-based communication around these topics, and as such should be aware of the ethical, legal, social, cultural, and spiritual aspects of care that may impact decision-making, to empower patients and families to use these technologies in a way that is both life-affirming and goal-concordant.

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