

Letter to Editor

## Considerations about the burial of foetuses of less than 20-weeks gestational age

Ezio Fulcheri<sup>1,2</sup>, Francesca Buffelli<sup>2</sup>, Cristina Fiore<sup>3</sup>, Alberto Izzotti<sup>4,5</sup>, Maria Teresa Piccardo<sup>5</sup>, Maria Beatrice Chiozza<sup>6</sup>, Paolo Petralia<sup>7</sup>, Rosagemma Ciliberti<sup>8</sup>, Alessandro Bonsignore<sup>9,10</sup>

<sup>1</sup> Section of Pathology, Department of Surgical and Diagnostic Sciences (DISC), University of Genova, Genova, Italy; <sup>2</sup> Fetal and Perinatal Pathology Unit, IRCCS - Istituto Giannina Gaslini, Genova, Italy; <sup>3</sup> Trainer and Counselor for CiaoLapo Ets; <sup>4</sup> Department of Experimental Medicine (DIMES), University of Genova, Genova, Italy; <sup>5</sup> Mutagenesis & Cancer Prevention Unit, IRCCS Policlinico San Martino, Teaching Hospital, Genova, Italy; <sup>6</sup> IRCCS - Istituto Giannina Gaslini, Genova, Italy; <sup>7</sup> General Direction of the Local Health Authority ASL4, Liguria Region, Italy; <sup>8</sup> Section of Bioethics and History of Medicine, Department of Health Sciences (DISSAL), University of Genova, Genova, Italy; <sup>9</sup> Section of Legal and Forensic Medicine, Department of Health Sciences (DISSAL), University of Genova, Genova, Italy; <sup>10</sup> IRCCS Policlinico San Martino, Teaching Hospital, Genova, Italy

Dear Editor,

the burial of foetuses of less than 20-weeks gestational age is becoming an ever more complex issue due to continuous legal and case-law developments and bioethical concerns.

From a legal point of view, the handling of foetuses under 20-week gestational age that have undergone a diagnostic test is fairly simple from an operational point of view: the 'state of affairs' is accepted, no further explanations, nor any particular procedure are required. The product of conception is assimilated to a part of maternal organs – hence, without legal personality or potential capacity for autonomous life. Therefore, upon diagnostic procedure completion, it can be disposed of without any particular procedure, similarly, for example, to a resected uterus with multiple myomas.

In other words, this procedure follows the rules for the storage and disposal of biological specimens <sup>1</sup>.

However, we know that – in practice, as well as biologically speaking – an embryo and a foetus are not part of the female genital apparatus (nor is the placenta), but rather constitute the essence/existence of an individual with its own phenotypic and genetic characteristics.

On the other hand, under applicable Italian law, parents are entitled to request the burial of a foetus irrespective of its gestational age. This right is guaranteed and implemented through a codified procedure at each hospital <sup>2</sup>.

The possibility to bury the products of conception in compliance with a personal initiative expressed in a project proposed by a secular or religious organization acting from a generic *pietas* or personal beliefs – of those who consider the foetus as an 'individual' – is shared by many and gets full theoretical support.

From a purely operational point of view, therefore, procedures must be established in order to implement what – in principle – is reasonably proposed from a common sense of respect for an individual that is being formed and is under development. Further, burial can obviously be important for coping with the loss and processing grief. And yet, this prac-

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### Correspondence

Alessandro Bonsignore  
Section of Legal and Forensic Medicine,  
Department of Health Sciences (DISSAL),  
University of Genova, via De Toni 12, 16132  
Genova, Italy, - Tel.: +390103537843,  
Fax: +390103537643 - E-mail: alessandro.  
bonsignore@unige.it

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tice, could be a further complication, and a source of additional suffering, thus leading to positions worth considering and respecting.

From a legal point of view, however, a number of problems arise which need to be described and solved:

- The first is the requirement that the burial must be strictly anonymous. It is not acceptable that the products of conception could be recognized, unless specifically so authorized by the parents or, at least, by the mother. On this topic, see the recent news that made the headlines, turned even more grotesque by the fact that since the foetus was given the mother's name, it was as if the mother had been buried<sup>3,4</sup>.
- This problem can be easily solved because the hospital, in addition to autopsy report traceability, conservation of the material taken during autopsy, of paraffin embedded blocks and histological preparations, can guarantee the traceability of the remains identified with the same number as the autopsy examination, thus, in this way, maintaining it strictly anonymous.
- It may be useful to trace the location of the disposed body whenever, even after a longer period of time, parents may want and consequently ask to know about the fate of the foetus body (in their grieving process or for healthcare reasons, which, even if unusual, should be carefully considered).
- Any non-hospital organization in charge of the burial must fully stick to these two basic principles (i.e. complete anonymity and traceability of the remains), while avoiding getting any information on, nor in any way handling, any sensitive data of the individuals concerned.
- However, the granting by the Hospital of the right to bury the products of conception, poses a serious problem linked both to religious beliefs and respect for agnostic or positivist theories.

Respect for religious belief necessarily implies that the Organization either is not openly linked to any religion in particular, since it would otherwise be in conflict with other religions (i.e. Catholics, Muslims, Jews, Pentecostals, Buddhists, Shintoists, etc.), or it should in any case avoid claiming it as a principle of exclusivity. In this context, it is all the more necessary that no religious symbols or signs are present at the place of burial.

Today, our multi-ethnic society has further exacerbated this problem, so much so that special funeral rituals linked to ethnic traditions are no longer uncommon in mortuaries. As a matter of fact, religious symbols are increasingly being banned in mortuaries, as well as on coffins or urns.

In this case, in order to ensure respect for an agnos-

tic, atheistic or positivist approach to life, any decision by parents, who consider the disposal of the abortion product – like any part of an organ or apparatus – as perfectly normal and accepted, must be abided by. Parents may, indeed, object to the preservation or burial of the foetus body that they do not value as an individual.

An opposite and specular consideration could also apply, whereby, since foetal remains are not considered to be an individual, any decision regarding their disposal becomes irrelevant. However, the burial of one's foetus, perhaps in a cemetery, may not leave parents indifferent and even clash against their idea of foetus.

There are also many other problems to be addressed: what to do, for example, if only one parent wants to bury the foetus? What should be done if only one parent doesn't want to know where the foetus is to be buried? Accepting that the foetus should be buried, does it also mean that parents may also have the right to choose where it should be buried?

All these considerations have been taken into account and discussed by a study group and must be carefully examined in order to seek a viable solution and operating procedures that can be generally adopted all over Italy.

The three following operating proposals have been worked out:

- 1 The body of the foetus after diagnostic testing is disposed of in the same way as any part of the human body (including specimen stocks) that has undergone diagnostic testing, in accordance with applicable regulations.
- 2 Burial (i.e. in degradable wooden box) is a problem that does not seem to have a solution yet. Many foetal autopsies are performed some time after expulsion and the foetus is fixed in formalin, not only to allow the diagnostic test to be postponed, but also to allow particular organs and systems to be examined using proper techniques. The foetus could be buried only after its immediate autopsy without formalin fixation. Conversely, in all other cases, the body is fixed in formalin and therefore cannot be interred.

Investigations carried out at the laboratories of Mutagenesis and Oncological Prevention of San Martino Hospital to assess the amount of residual formalin have shown that formaldehyde concentrations remain high even after several and different treatments of the body with absorbing and neutralizing polymers.

Formaldehyde attaches itself permanently to tissues without changing their morphology, forming methylene covalent bonds and promoting intra- and intermolecular cross-links between adjacent amino acid groups<sup>5</sup>.

Absorbent polymers, activated carbons and photocatalysts (TiO<sub>2</sub>), when in the presence of UV light, can decrease surface formaldehyde concentrations, but have no effect on deeply fixed formaldehyde. Consequently, according to the results obtained and since there are no other literature data on this subject, formaldehyde fixed inside the tissues cannot be neutralized in any way without deeply altering the characteristics of the tissues themselves.

3 Burial in a zinc casket is the only viable solution today, which is both anonymous and fully respectful of the human nature of the foetus and the parents' choice, if any is made. It features a multiple burial of different foetuses placed in vacuum plastic bags, without formalin, and identified only by the number of the autopsy examination to which the foetus refers. This is done in full compliance with applicable privacy legislation and to guarantee the absolute anonymity of the subjects, while maintaining strict traceability of the procedures. Burial may be organized periodically by the Hospital itself or by an organization that adheres to the above described principles. From a more comprehensive ethical point of view, however, it is necessary to point out the distinction between funeral practices – linked to individual rituals and the beliefs of parents (religious practices) – and a simple and dignified burial, whose sole purpose is to respect the value of human life. The issue under discussion is related to a key question in the ethical debate from the dawn of human existence, about the status of the foetus and the moral value to be attached to the human being<sup>6</sup>. Termination of pregnancy, under certain conditions, is allowed by Italian law, as well as by the law in many other countries, which is making the debate on the value of human life from its very beginning, even more intense. Being able to bury a foetus could be an expression of recognition of prenatal mourning, which – being poorly

considered – might be even more difficult to cope with and process. At the same time, the decision by those who prefer to remove this grief – which the burial ritual might even exacerbate – must also be considered and respected<sup>7</sup>. In dealing with these difficult dilemmas, when deciding to provide burial to an unborn child, any likely ideological implications should be ruled out. Recognizing the burial of a foetus as a means of affirming its dignity as a 'person' is somehow problematic in our secular and plural society. Finally, in order to provide answers and support at such crucial time, ways must be identified to protect and respect prematurely terminated human life. They must be shared, respectful of different positions, and capable of offering recognition and acceptance of different parent demands.

## References

- 1 Ministero della Salute, Consiglio Superiore di Sanità: "Linee Guida su tracciabilità, raccolta trasporto, conservazione e archiviazione di cellule e tessuti per indagini diagnostiche di Anatomia Patologica" Maggio 2015
- 2 DPR 10 settembre 1990, n. 285: "Regolamento di Polizia Mortuaria" <http://www.gazzettaufficiale.it/eli/gu/1990/10/12/239/so/63/sg/pdf>
- 3 <https://www.avvenire.it/amp/attualita/pagine/feto-sepolto-a-roma-con-nome-della-madre>
- 4 [https://roma.corriere.it/notizie/cronaca/20\\_settembre\\_30/roma-feto-sepolto-col-nome-mamma-interrogazione-conte-7a24c114-0332-11eb-a582-994e7abe3a15\\_amp.html](https://roma.corriere.it/notizie/cronaca/20_settembre_30/roma-feto-sepolto-col-nome-mamma-interrogazione-conte-7a24c114-0332-11eb-a582-994e7abe3a15_amp.html)
- 5 Howat WJ, Wilson BA. Tissue fixation and effect of molecular fixatives on downstream staining procedures. *Methods* 2014;70:12-19. <https://doi.org/10.1016/j.ymeth.2014.01.022>
- 6 Patuzzo S, Goracci GB, Gasperini L, et al. 3D Bioprinting Technology: Scientific Aspects and Ethical Issues. *Science and Engineering Ethics* 2018;24:335-348. <https://doi.org/10.1007/s11948-017-9918-y>
- 7 Tesi C, Licata M, Picozzi M, et al. Fate of stillborns. Perceptions from a historical, anthropological and bioethical reasoning. *Journal of Maternal-Fetal and Neonatal Medicine* 2021;2:1-6. <https://doi.org/10.1080/14767058.2021.1958776>